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Illustrations OF HOSPITAL PRACTICE:

METROPOLITAN AND PROVINCIAL.

ST. THOMAS'S HOSPITAL.

CASE OF POLYPUS NASI, EXTENDING UPWARDS, AND PRODUCING ABSORPTION OF THE BODY OF THE SPHENOID BONE, AND OBLITERATION OF THE INTERNAL CAROTID ARTERY, FOLLOWED BY ABSCESS IN THE BRAIN.

Under the care of J. SIMON, Esq.

[*From notes by* W. M. ORD, ESQ., *Surgical Registrar.*]

CHARLES E., aged 50, a labourer, was admitted under the care of Mr. Simon, on January 2nd, 1858. He stated that, about thirty years ago, feeling his nose obstructed, he went to a surgeon, who detected the existence of a polypus, and succeeded in partially removing it. The polypus, however, soon sprang up again; and at different times, its evulsion by instruments, or its extirpation by chemical agents, was attempted. Within a short period of his admission, he noticed that he was becoming deaf; and soon afterwards the sight of the right eye became impaired, the impairment going on rapidly to complete loss of sight in that eye. The immediate cause of his seeking admission was the occurrence of repeated hæmorrhage from the nose.

When admitted, he was observed to have a somewhat fatuous expression of countenance, although no mental infirmity appeared as yet. The right eye was completely blind. In the left, internal strabismus existed. The hæmorrhage had left him very exsanguine.

Shortly after admission, the right nostril was plugged on account of hæmorrhage; and, after the removal of the plug, on the third day, it was noticed that his hearing was improved.

January 7th. He was seized with convulsions of an epileptiform character, and remained afterwards partially hemiplegic on the left side.

January 17th. A similar seizure ended in complete coma, which terminated fatally at the end of thirteen hours.

The *post mortem* examination was conducted by Mr. Sidney Jones. The body was found to be rather emaciated. The breadth of the nose at its root was increased; and each nostril was occupied by part of a large polypus, having the ordinary fibro-cellular structure. The membranes of the brain at the vertex were healthy. The left hemisphere of the brain appeared quite healthy, but in the right were three collections of pus—one close to its upper surface, just in front of its posterior extremity; another, about half an inch from the surfaces beneath about the middle of the external surface of this hemisphere; and a third, situated more deeply, as well as further inwards, involving the outer side of the right corpus striatum, and extending almost, but not quite, to the lateral ventricle. The second one of these was the largest, filling a cavity large enough to contain a small hen's egg; the other two were smaller, and the cavities containing each might have held a pigeon's egg. Each abscess was bounded by brain-tissue, somewhat reddened, and much softer than natural: indeed, on examination, the whole of this hemisphere was found softened, the softening being very marked on comparison with the structure of the opposite hemisphere. The ventricles were dilated, and contained a quantity of rather turbid serum. On removal of the brain, the dura mater lining the base of the skull was found entire, and without lymph on the parietal arachnoid; but, in the region of the basilar process and sella turcica, the dura mater was somewhat thickened; and beneath it there was evidently a deficiency of osseous structure, the anterior part of the basilar process having been absorbed. The posterior clinoid processes were readily movable, and one or two loose fragments of bone might be felt behind them. By raising this portion of dura mater, the sphenoidal sinus was opened, and a growth was seen to be occupying it, which had the ordinary structure of mucous polypus. It is true that microscopical examination showed the presence of distinct myeloid cells, but these were in connexion with thickened dura mater in contact with bone: the general structure of the growth consisted of a fibrous tissue swelling up and becoming indistinct on the addition of acetic acid, which also brought into view a number of elongated nuclei. In front of the anterior clinoid processes, the removal of the dura mater showed great discoloration of the subjacent bone, and fibrous prolongations continued through the substance of the bone to the under surface of the dura mater. The cribriform plate of the ethmoid was perhaps rather more brittle than usual: the dura mater, however, that covered it, was healthy. It was found impossible to define the parts in connexion with the right cavernous sinus; the dura mater forming its outer wall, and the parts in the latter and in the sinus, being confounded together by inflammatory deposit. The internal carotid might be traced into the sinus for about a third of an inch; but between this limit and the point where the artery turned upward beneath the anterior clinoid process, the coats of the vessel could no longer be traced. After entering the cavernous sinus, the coats seemed to have become separated, and the two sides of the internal coat had become adherent; so that a rounded end was formed, blocked up by a firm and adherent clot, about a quarter of an inch in extent. The osseous structure forming the internal boundary of this sinus had been completely absorbed.

The pericardium and heart were healthy, except that the latter was large and flabby. The lungs were adherent to the ribs in several spots, and their bases congested.

Nothing particular was noticeable in regard to the abdominal organs, except, as a rule, the pale appearance of their section.

REMARKS. We referred in our last number to the fortunate termination of a case in which a fibrous polypus, attached to the base of the skull, had been removed by Mr. Tatum, after excision of the upper jaw. In some comments which we made upon that case, when its details were first published (p. 61), we endeavoured to justify the boldness of the operative procedure adopted by the urgent motives which influenced Mr. Tatum's course at that time, viz., "the rapid growth of the tumour, the great inconvenience which it occasioned, and its tendency to hæmorrhage." The dangers which beset these cases from the latter cause were then illustrated by the particulars of case, under the care of Mr. Birkett, reported at p. 119. We now give a case illustrating a more insidious, but not less fatal termination, which is sometimes observed in the fibrous tumours which spring from the base of the skull, viz., that they pass upwards into the cranial cavity, and cause death by injury to the brain. This is a far more surely fatal course than when they bleed into the nose or pharynx, inasmuch as it appears to be seldom accompanied by alarming symptoms until it has become too late for interference; while the tumours which bleed copiously frequently lose their vitality by that very hæmorrhage, and the case thus undergoes a spontaneous cure. Of this, Mr. Birkett's case above referred to may be taken as an instance; for although the carotid artery had been tied on account of the bleeding, it recurred after the operation to so great an extent that his life was despaired of. In spite, however, of this alarming hæmorrhage (or rather, perhaps, by means of its destroying the nutrition of the tumour), the patient is now perfectly well. Another somewhat similar case, in which the tumour sloughed away after the occurrence of profuse hæmorrhage, was alluded to at p. 61. In the present instance it will be seen that no very alarming symptoms were known to have accompanied the growth of the polypus until a

short time before his admission. The innocent nature of the tumour is evident from the history, which extended over a period of thirty years, and from the microscopic examination; for no great importance can be attached to the presence of the myeloid cells. There seems little reason to doubt that the tumour might have been removed at some earlier period by excising the upper jaw, had the symptoms indicated the necessity of such a procedure. This, however, in a polypus which only projects into the nose, is hardly to be expected. Still, when the patient's life appears in danger from the hæmorrhage, and his general condition is such as to give a fair prospect of his surviving the operation, it is undoubtedly right to propose it. No such opportunity occurred in the case before us, otherwise it is possible that the disease might have been eradicated. The French surgeons speak of an operation in which the alveolar arch is preserved, and still a sufficient portion of bone is taken away to allow of the neck of the tumour being reached. This would, of course, avoid the only inconvenient result of the operation—viz., the deficiency of the hard palate; but it seems to us (without pretending to any experience on the point) only applicable to those cases where the tumour is connected with the antrum.

For the details of another case, in which a fibrous polypus had perforated the base of the cranium, our readers may consult M. Forget, in the *Bulletin de la Société de Chirurgie*, ii, 62.

ST. BARTHOLOMEW'S HOSPITAL.

PARTIAL AMPUTATION OF THE FOOT, WITH SECTION OF THE TENDO ACHILLIS: ERYSIPELAS, PHLEBITIS, AND PROBABLY PYÆMIA: RECOVERY.

Under the care of E. Stanley, Esq.

[*From Notes by* G. Reed, Esq., *House-Surgeon.*]

March 11th. Miles Jordan, aged 43, a robust, healthy looking man, was admitted into the Hospital on account of injury to the left foot thirteen months previously. His history is as follows. He is a native of Sunderland, a captain of a merchant ship. He has had two attacks of fever in the tropics, and yellow fever once in the West Indies. He has been accustomed to live well, and partake moderately of stimulants, though not to intoxication. Thirteen months since a loaded waggon passed over the forepart of his foot. Some bones were then stated to have been broken. He has been under surgical care ever since, but has been quite unable to make any use of his foot. It is now much thicker and shorter than natural, and altogether changed in shape. There are some fistulous openings in the dorsum of the foot, from which, at different periods, several small pieces of bone have been removed. A probe introduced into them leads down to exposed bone. The medical man under whose care he had been was strongly opposed to any operation; but the patient himself had now come into the hospital with the intention of submitting to any operation which would be likely to afford him relief, short of amputation of the whole foot. As the ankle joint was not implicated, the disease of the bone the result of accident, and limited to the front part of the foot, Mr. Stanley determined to remove the diseased portion at the metatarsal bones.

On March 20th, the anterior part of the foot was removed by sawing through the bases of the metatarsal bones, an ample flap being obtained from the sole. The insertion of the tibialis anticus was believed to have been left; but, to guard against undue action of the flexor muscles, the tendo Achillis was divided subcutaneously at the same time.

The part removed was found to contain a piece of dead bone of about the size of a hazel-nut, evidently a portion of one of the cuneiform bones which had been sawn through. This was not fully examined until a day or two after the operation, so that it was too late to attempt any remedy by searching for the other piece; but as a second cut had been made after the removal of the first portion, it was confidently hoped that it had been taken away, and would lead to no further trouble. He bore the operation well. A day or two afterwards there was some little puffiness and redness, extending from the subcutaneous wound behind to the wound in front, which led to slight suppuration; but the flaps united well at the edges, except an opening on the outer side of the foot upon which the stump rested. This opening gave free exit to the discharge, and everything appeared to be going on favourably.

On the morning of April 3rd, just a fortnight after the operation, after having passed a comfortable night, he was attacked with severe rigors. The stump was swollen and very painful; no lodgment of matter could be detected; a probe passed into the opening reached nearly to the opposite side, the union of the flaps being principally at the edges. The leg and thigh were œdematous and painful, especially in the course of the saphena vein. The tongue was dry, but nearly clean. Pulse 120, of moderate power. He had very little appetite, but great thirst. The bowels were somewhat confined. As he had been living rather generously, with meat and wine, he was ordered a diet of milk and beef-tea. An aperient, with salines, was prescribed. He was ordered ten leeches in the course of the saphena vein.

April 4th. He had half a grain of morphia last night, but was very restless, and was obliged to be sustained with wine. The bowels had acted three times. The stump was more swollen, and there was a bulging of matter about the tendo Achillis, which was opened, and discharged freely; a blush of redness extended some distance up the leg, with markings in the course of the superficial veins about the knee and thigh. The leeches had somewhat relieved the pain. Pulse more feeble; tongue dry and brown. Since the early part of the morning he had been troubled with incessant hiccough. He was ordered to have ten minims of chloric ether in peppermint water, every four hours. The ether was afterwards increased to half a drachm, but without any relief to the hiccough.

April 6th. Between April 4th and 6th, his condition had become much worse. The hiccough still persisted, though various remedies had been tried. Ice appeared to control it, but only for a short time. He perspired profusely; was unable to pass his water. A herpetic eruption surrounded the lips and nose; the countenance was sallow; the tongue very dry, with sordes about the lips and teeth; the pulse very weak, and, at times, intermitting. The abdomen was distended and tympanitic. The redness was becoming more general over the leg, with patches about the thigh. The whole limb was much swollen. The wound continued to discharge, but the fluid was thinner in character. He took about eight ounces of brandy and twenty ounces of wine daily. He was ordered to have a belladonna plaister applied to the epigastrium, and to have an assafœtida injection.

April 7th. He perspired profusely; the hiccough was incessant and he was much weaker. The countenance was more jaundiced; the abdomen was more distended. The bowels acted to-day, but in a confined manner; the motion was light coloured. He took nourishment pretty well. The brandy and wine were increased. Five grains of calomel were ordered to be placed upon the tongue.

April 8th. The calomel was repeated again early this morning. The bowels acted three times during the day, the last motions being more healthy. He was not quite so sallow. The perspiration and hiccough continued. The pulse was more feeble, occasionally intermitting. The erysipelatous patches had varied much during the last few days, but the swelling remained the same. He was ordered to continue brandy and wine. He was ordered—

℞ Hydrarg. chloridi gr. v; pulv. opii gr. j. M. Fiat pulvis hâc nocte sumendus.

℞ Ammoniæ sesquicarb. gr. vij; tincturæ cardam. comp. ʒj; aquæ menthæ pip. ʒj. M. Fiat haustus 6tis horis sumendus.

April 9th. The pulse was more feeble at times, varying from 120 to 60 beats per minute. He had had morphia throughout at night, but slept very little. Last night he was more inclined to sleep; but, if allowed to do so for more than half an hour or an hour without nourishment, he woke up quite exhausted. He had taken, during the last twenty-four hours, twenty ounces of brandy, and twenty-four ounces of wine.

2½ P.M. The draught was repeated every four hours, half a drachm of liquor cinchonæ being added to each dose. The bowels were rather purged; he was ordered to have half a drachm of laudanum immmediately. In the evening, he was in a state of extreme exhaustion. The perspiration was profuse, and the hiccough became more and more frequent, not ceasing even when asleep. One grain of solid opium was ordered to be given every two hours, until he began to show evidence of being under its influence. This was commenced about 8 o'clock, and between that time and the next evening he took eleven grains. As he felt very drowsy, and the pupils were contracted, the pills were then discontinued. He took, during the same twenty-four hours, twenty-five ounces of brandy, and twenty of wine, besides other nourishment. After the first few

doses of opium, the hiccough became manifestly less, and gradually ceased. There was much less perspiration during the day. The pulse became regular, with more power.

April 11th. He passed a good night; there was no hiccough, and very little perspiration. There was a little redness remaining about the stump, but no pain. He took no medicine, with the exception of one or two grains of opium at night. The stimulants were continued.

April 15th. The leg and foot were still somewhat œdematous; the stump was nearly healed. He had had no return of hiccough, and slept without opium. The stimulants had been reduced to ten ounces of wine, and fifteen ounces of brandy.

April 28th. He was progressing favourably, and had been able to get about the ward for some days, with the aid of crutches. The stimulants were reduced to four ounces of brandy, six ounces of wine, and one pint of bitter ale.

May 20th. The stimulants had been gradually reduced to six ounces of wine and one pint of ale; and he had gone on uninterruptedly well until to-day. This morning he complained of headache and sickness. The leg was a little swollen, with some erysipelatous patches about it. The stump was healed, except on the outer side, where there was some tenderness, and a small scab, which, on coming away, left a little elevated granulation; but there was no passage for a probe. The bowels were rather confined; the tongue moist, and a little coated; pulse 90, of good volume. His wine and ale were taken off, and an aperient with salines was ordered. The leg had quite recovered itself in a few days; and he has continued to improve up to the present time (June 1st). He has to-day left the Hospital, to go into the country for a month, with a good stump, the cicatrix being entirely on the dorsum of the foot. He bears pressure well all over it, but the small papillary elevation still remains on the outer side of the foot. He has not attempted to walk much on it yet.

REMARKS. The symptoms which are usually supposed to accompany pyæmia are observed, in most cases, to run the same course, and to be almost unaffected by any treatment. Coming on, as in this case, with rigors, perspirations, hiccough, and the usual accompaniments of typhoid fever, occurring, as in this case, several days after an amputation, without any local change in the stump to account for them, they are almost invariably followed either by the death of the patient before the formation of abscess, or by the deposition of matter in the viscera, joints, or cellular tissue, which is usually followed by a similar fatal termination. The fact, however, of the formation of abscess is generally considered as being unessential to the case, and rather to be regarded in the light of an accident, very common, indeed, in such cases, and a necessary result of the contamination of the blood, if the case lasts long enough to show it, and the disease is unchecked, but not so much a part of the disease as one of its events. Now, this appears to have been the only symptom wanting to complete the history of this case, as one of pyæmia; and the disease manifestly yielded to the exhibition of opium in the solid form, and in very large doses, combined with great quantities of alcohol.

We have therefore thought the case of sufficient interest to report, in case that any of our readers should be disposed, in a disease so almost uniformly fatal, to institute a similar experiment. We have no doubt that the same plan of treatment has been tried before with a different result; still, the present case was almost indubitably one of *cure*, not of *recovery*, as the patient got steadily worse till the treatment was adopted, and then mended forthwith—a fact which makes it the more worthy of attention. In a future number we hope to recur to the subject, while adducing the particulars of other cases in which pyæmia appears to have existed, and recovery has taken place.

WORCESTER INFIRMARY.

CASE OF HYDATIDS OF THE LIVER.

Under the care of SIR CHARLES HASTINGS, M.D.

[*Reported by* ERLIN CLARKE, M.B., *late House-Surgeon.*]

THE notes of this case will be found imperfect, as the woman was in the Infirmary only a few days before her death, and was in a very weak state, and unable to give a clear account of her illness.

Fanny Longford, aged 32, a married woman, was admitted March 13th under Sir C. Hastings. She was suffering from ascites and anasarca in an advanced stage, with dyspnœa and weak pulse; and during the few days she was under observation she complained occasionally of pain in the region of the liver, and troublesome vomiting of bilious matter. The ascites prevented any very accurate examination of the liver; and no enlargement of that organ was detected during life. The history she gave was that she had been confined about six weeks ago, and that a month before her confinement a considerable quantity of water drained away from the vagina, reducing considerably the dropsy from which she had suffered during her pregnancy. She stated, also, that during labour the liquor amnii was discharged in the ordinary way; and very shortly after her confinement the dropsy returned, and had steadily increased. There was no trace of albumen in the urine.

On March 22nd she died; and, at the *post mortem* examination, besides a considerable amount of effusion in the pleura, perinæum, and peritoneum, the right lobe of the liver was found to contain a large hydatid cyst, of a capacity of about a pint and a half. The fluid was yellow and seropurulent, and in it floated a large number (100 or 200) of secondary cysts, of various sizes, from that of an egg to a pea. In these the fluid was clear and transparent, and numerous echinococci were observed on a microscopic examination. On slitting up the intestines, a single ascaris lumbricoides was observed in the jejunum.

SALOP INFIRMARY.

SEPTUM IN RIGHT AURICLE.

By WILLIAM A. P. DICKIN, Esq., House-Surgeon.

J. J., aged 33, whilst waiting to present his recommendation in the admitting room of the Salop Infirmary on May 1st, fell down, and died comatose in two minutes.

A *post mortem* examination was made forty-eight hours after death. The body was that of a florid, muscular man, without any œdema or other external sign of disease. The heart weighed thirty-four ounces and a half; it was very large, pale, and flabby. The right side contained a very large amount of dark blood, as did also the pulmonary vessels. Both mitral valves were thickened by a fatty fibrinous deposit, and were imperfect in their action. The left ventricle was much dilated, and its walls were thickened. The aortic and semilunar valves were perfect. Placed upon the top of the left auricle, was a fifth cavity, almost as large as the auricle proper, and capable of containing two ounces of blood. It was separated from the auricle by a thin, strong, transparent septum. About the centre of this septum was a foramen communicating with the auricle, an inch and a half in circumference; the edges of the foramen consisted of a perfect ring of bone; thus the opening was quite patulous. Into the upper sac opened the pulmonary veins on each side. Into the auricle proper there was no opening of vessels; the only communication being through the foramen. The walls of the supplementary sac were continuous with those of the auricle, the muscular fibres being continuous, as was also the lining serous membrane with its peculiar epithelium the same in both sacs. Where the septum was attached to the walls of the auricle, there was no contraction or peculiarity. There was not the least appearance of the sac being of aneurismal origin, but it appeared, as doubtless it was, a congenital malformation. The lungs were much gorged with dark blood; other organs healthy.

No previous history is known of this man, except that he was supposed to have some disease of the heart; and I hear that he followed his employment up to the day of his death, when he walked some distance to present his recommendation for admission.

THE VACANT PROFESSORSHIP OF CHEMISTRY IN EDINBURGH. Professor George Wilson entered the field with such prospects of success, that his election might have been looked for as certain, had he not subsequently retired from the contest at the request of Government, who have liberally increased his salary, so as to keep a useful public servant in a post for which he is admirably qualified (that of Professor of Technology). This withdrawal has enabled Dr. Lyon Playfair to commence his canvass, because, as we understand, that gentleman had determined to offer no opposition to the claims of his friend Dr. Wilson. Professor Anderson of Glasgow, Professor Blyth of Cork, and a Dr. Maxwell Simpson, are also named as candidates. The strange proposal to offer the Chair to Dr. Faraday has met with a decided refusal from that distinguished physicist. The election is to take place on the 29th of June. (*Edinburgh Medical Journal.*)

Original Communications.

HISTORY AND APPLICATIONS OF CARBONIC ACID AS A LOCAL ANÆSTHETIC.

By J. Y. SIMPSON, M.D., Professor of Medicine and Midwifery in the University of Edinburgh, etc.

BY various extracts and notices, the attention of the readers of the BRITISH MEDICAL JOURNAL has been more than once directed, within the last few years, to the effects of carbonic acid as a local anæsthetic application. (See, for example, ASSOCIATION MEDICAL JOURNAL for September 1856, p. 835; and BRITISH MEDICAL JOURNAL for April 10th, 1858, p. 292.) The question, also, of priority as to the use of this topical anæsthetic has been so far brought forward in the observations of Dr. Johns of Dublin (see BRITISH MEDICAL JOURNAL, April 1858, p. 292); and by a letter from Dr. McClintock, the Master of the Dublin Lying-in Hospital (see *Dublin Medical Press*, March 17th, 1857.) I hope, therefore, that I may be here excused from recapitulating the following observations; first, with regard to the past history of the practice; and second, with regard to the surfaces to which carbonic acid gas may be applied as a local anæsthetic; though most of these remarks have been already published by me in the *Dublin Medical Press* for April 21st, 1858.

HISTORY OF CARBONIC ACID AS A LOCAL ANÆSTHETIC.

In a paper on Local Anæsthesia, and on its modes of artificial production by chloroform and other agents, published in the Journal of the Provincial Medical Association ten years ago (July 1848), it was stated by me, that I had "tried the application of various anæsthetic gases and vapours to the vagina, in cases of vaginal irritation and neuralgia. The stronger forms cannot be borne. I was induced to try them in consequence of the following curious statement regarding *carbonic acid*, published by Dr. Pereira. (*Materia Medica*, vol. i, p. 155.) A lady who had suffered a considerable time from some uterine affection, and had derived no relief from the treatment adopted, was advised to consult a physician in Italy (Dr. Rossi). After he had examined the condition of the uterus, he assured her there was no organic disease, but merely a considerable degree of irritation, for which he proposed to apply *Carbonic Acid* as a sedative. This was done by means of a pipe and tube, communicating with a gasometer situated in another room. The patient obtained immediate relief; and, although she had been obliged to be carried to the doctor's house on account of the pain experienced in walking, she left it in perfect ease. On her return to England, she had a relapse of the complaint, and applied to Dr. Clutterbuck to know whether she could have the same remedy applied in London, in order to save her the necessity of returning to Italy." (*Provincial Medical and Surgical Journal*, 1848, p. 365.) When writing, seven or eight years subsequently, on the subject of the topical anæsthetic effects of carbonic acid gas, I took occasion further to observe: "This case and paragraph, however, seemed to Dr. Pereira of so little value, that he omitted the details of it in the last edition of his work. But, from the time of reading it, I have tried at various times, and more particularly during the last two or three years, the local application of carbonic acid to the mucous membrane of the vagina and cervix uteri, in different painful conditions of the uterus and neighbouring parts; and, whilst it has failed in some instances to afford the expected relief, it has in others proved of great, and occasionally of almost instantaneous benefit." (*Obstetric Memoirs and Contributions*, vol. ii, p. 771.)

In the published essay from which I have made this extract, and which was written in the beginning of 1856, at the request of my friend Dr. Stewart Campbell of New York, for the Academy of Medicine of that city, I attempted briefly to prove —1. The strong constitutional anæsthetic effects of carbonic acid when breathed, by referring to the well known experiment of the effects of it upon the dog when temporarily plunged into the gas contained in the Grotto del Cane at Pozzuoli; 2. Its local anæsthetic powers, as shown when a stream of it was directed upon any sensitive part of the surface of the body; and 3. Its curious topical effects when applied to different morbid and supersensitive parts. At the same time, I took occasion to show that the practice of applying carbonic acid locally was in principle by no means a discovery of late times. In some very practical observations by Dr. Johns of Dublin (part of which has been cited in the BRITISH MEDICAL JOURNAL for April 10th, 1858), that gentleman observed: "I cannot say to whom the credit of discovering its sedative and curative powers is justly due, as that question, I believe, is still in abeyance. Dr. Simpson of Edinburgh is the person who has brought them so prominently before the profession; but (adds Dr. Johns) Mojon used this gas long prior to him; and report now states that some recommended it prior to the latter named gentleman: however, one thing is very certain, that it has been resorted to, in the form of effervescing draughts, and in chalybeate waters, through the medium of baths and injections, as long as the most senior among us can remember, although perhaps the advantages thence arising may have been attributed to other causes."

In the essay *On Carbonic Acid Gas as a Local Anæsthetic in Uterine Diseases, etc.*, presented to the New York Academy of Medicine, and published in the second volume of my *Obstetric Memoirs*, I have tried to state at some length the principal historical points, as far as I then knew them, connected with the employment of this agent in medical practice. A brief recapitulation of these points from the essay in question will show that the therapeutic history of carbonic acid gas as a local application not only includes all the matters above adverted to by Dr. Johns, but embraces others of as great, if not greater interest.

In the essay alluded to, I endeavoured to bring evidence to prove the following facts regarding the local application of this gas as a therapeutic anodyne agent to the following surfaces and parts:—

I. Carbonic acid has been recommended as a local anæsthetic in some uterine diseases; in modern times, by Dewees in 1835, Mojon (1834), and Rossi; apparently also by Rueff and Ambrose Paré in the middle ages; and by Paulus Ægineta and Hippocrates in far more remote times.

II. Carbonic acid has been used in the form of injection into the lower part of the bowel, in diarrhœa and dysentery, by Mr. Parkins in our own day; and in the last century, by both Mr. Hey of Leeds and Dr. Percival of Manchester in 1772; and during the later years of the same century, by Drs. Warren, Henry, etc.

III. Carbonic acid was about the same time applied in a case stated by Dr. Percival, as a local sedative or anæsthetic in painful aphthous ulcer at the point of the tongue.

IV. Carbonic acid was also, in the latter part of the eighteenth century, applied as a local sedative to the cutaneous surface of the body in ulcers, open cancerous sores, etc., by Percival, Ewart, Beddoes, etc. Indeed, the antiquated yeast poultice of surgeons probably acted principally as a sedative by virtue of the carbonic acid constantly eliminated from its surface.

V. Carbonic acid has been prescribed constantly by physicians, in sickness, vomiting, etc., as a sedative to the interior of the stomach, in the form of effervescing draughts, ever since these draughts were introduced into practice two centuries ago by Riverius.

VI. In the same essay, I suggested that the anæsthetic powers of carbonic acid, when topically applied, afforded a probable explanation of the local anodyne and sedative effects of vaginal, etc., injections of those German waters which contained free carbonic acid; and gave us a clue also to the comprehension of the curative influence of the gas baths and gas douches of Neuheim, Marienbad, etc.

Having adverted in my original paper to all these previous and various therapeutic uses of carbonic acid by different physicians and surgeons, and under different forms, I trust that I will not be accused of having brought forward the practice as anything very novel, when I called, two or three years ago, the special attention of my professional brethren to the curative effects of carbonic acid as a local anæsthetic. I certainly did not, by any means, claim the practice as "Scottish in its origin."

But my esteemed friend Dr. McClintock, the distinguished master of the Dublin Lying-in Hospital, has claimed the idea as fundamentally "Irish". In the *Dublin Medical Press* for March 17th, Dr. McClintock writes, that he has "much pleasure" in stating a fact, the publication of which (says he) "may prevent *needless* controversy about priority of claims" in reference to this use of carbonic acid; viz., "that the local application of this agent as an anæsthetic was known to the justly

celebrated Dr. David McBride, of Dublin," who "made it the subject of a communication to the Medico-Philosophical Society of Dublin about the year 1775," though his communication is as yet unpublished.

It would surely not be uninteresting to publish Dr. McBride's observations, even thus late, if they are of any value. But from the high and candid character of that physician, I should feel inclined to doubt if he lays claim, in the unpublished paper alluded to, to any priority in the local medicinal application of carbonic acid, as the employment of it had been already spoken of in those published works and letters of Priestley, Hey, and Percival, to which I have referred, and with those writings Dr. McBride was no doubt sufficiently familiar; not to speak of physicians of still more antique date. In a letter of the celebrated surgical author, Mr. Benjamin Bell, published by Dr. Thomson, and written on March 30th, 1772, that gentleman tells Dr. Cullen, among other "London medical gossip" of that day, two circumstances; viz., 1st, that the "*Theory and Practice of Physic*, by Dr. McBride, was published two days ago, but I have not seen it;" and, 2nd, he had heard Dr. Priestley read a paper at the Royal Society, mentioning the trial of an injection of carbonic acid into the bowels in a case of fever. (Dr. Thomson's *Life of Dr. Cullen*, vol. i, p. 648.) Neither in his *Experimental Essays* (1764), nor in his *Practice of Physic* (1772), does Dr. McBride, as far as I remember, allude to any topical use or application of carbonic acid; and yet Mr. Bell's letter shows that the gas was tried therapeutically in London at the date, or rather before the date of the appearance of his last published work. Further, however, Priestley, Hey, Percival, etc., had written and published on the subject two or three years before the supposed date of the reading of Dr. McBride's unpublished paper in 1775. In fact, if the practice is to be claimed as Irish, Dr. McClintock will, I fear, require to prove that Hippocrates, or at least the author of the Hippocratic *Treatise on the Diseases of Women*, was a cadet of some Milesian family, who had returned from Ireland to Greece; and I have rather strong suspicions that adequate evidence of this descent will transcend even the boundless genealogical knowledge of my two learned friends, Professors Currie and Donovan.

PARTS AND SURFACES TO WHICH CARBONIC ACID MAY BE APPLIED.

In the preceding remarks, we have seen that carbonic acid has been formerly applied in some form as a local anodyne or anæsthetic to various parts or surfaces; as—

1. *The Vagina and Uterus.*
2. *The Rectum and Lower End of the Intestinal Canal.*
3. *The Interior of the Stomach.*
4. *The Surface of the Tongue.*
5. *The Ulcerated Surface of the Skin, Mamma, etc.*

There are other surfaces and structures upon which I have found the local application of carbonic acid act sometimes with remarkable success as a local anodyne or anæsthetic; as—

6. *The Mucous Surface of the Eye.* I have used it principally in cases of photophobia and hyperæsthesia of the eye connected with scrofulous ophthalmia, where often it gives speedy and marked relief. A few drops of chloroform evaporated from the palm of the patient's hand and held near the eye will generally, in the same way, allow a photophobic eye to open, and form an application far more easily used, and as curative as any medicated liquids or collyria dropped into the eye.

7. *The Mucous Surface of the Bladder.* In my essay on carbonic acid as a local anæsthetic, I mentioned a case of dysuria and great irritability of the bladder, in which, after many modes of treatment had failed, the injection of carbonic acid gas into the vaginal canal several times a-day at once produced relief, and ultimately effected a perfect cure. I lately heard of this patient remaining perfectly well.

Before 1732 the celebrated Dr. Hales had described to the Royal Society the injection, without injury, into the bladder of the dog of a menstruum, consisting, to use the words of Dr. Willis, "of a mixed solution of bicarbonate of potash, sulphate of potass, and *carbonic acid* in water." (*Urinary Diseases*, p. 330.) In consequence of his attention being directed to the subject by my paper, as analysed by M. Follin in the *Archives Générales de Médecine*, M. Broca injected carbonic acid into the bladder, and published some of the successful results which he obtained in the *Moniteur des Hôpitaux* for August 1857. More lately (March 1858), Dr. Johns has brought the same method of treatment under the notice of the profession in Dublin. In my earliest experiments upon injecting carbonic acid into the bladder three years ago, I erred in not having a sufficiently sized catheter, or limb of a double catheter, to carry off the gas as it accumulated in the bladder. I latterly resumed the practice principally in consequence of the representations of success from it obtained in Paris and Dublin. And perhaps I will be excused for remarking that there is no class of ailments more distressing, or more difficult to treat, than the different forms of morbid irritability of the bladder, and in the management of the affections I have obtained far more favourable results from the local application and injection of carbonic acid than I could have ventured to anticipate. I have now repeatedly seen dysuria and extreme irritability of the bladder speedily relieved by a few injections of carbonic acid gas; and patients who were obliged from these causes to rise many times each night have been enabled by its use to sleep continuously for the usual number of hours. The freedom and safety with which carbonic acid and some other medicinal fluids and liquids may be injected into the cavity of the bladder with a double catheter will probably be ere long more fully acknowledged by the profession, and great practical advantage taken of this fact in the treatment of dysuria and other morbid states of the bladder.

In one of his letters to Dr. Priestley, dated 1775, Dr. Percival states that he had found "by repeated trials that calculi are soluble in water impregnated with fixed air," or carbonic acid; and he adds that it had acted in his experiments "upon every calculus which was suspended in it." He and Dr. Home hoped that carbonic acid given in effervescing drinks by the mouth would reach the bladder as carbonic acid, and there act as a lithontriptic upon the contained calculus. But if carbonic acid can act upon some forms of urinary calculus as a dissolvent, we know that it can be introduced freely and continuously by a double catheter into the bladder. In a most interesting case reported by Sir Benjamin Brodie, the repeated injection of a very weak solution of nitric acid into the bladder successfully dissolved and removed a phosphatic calculus; and he has found the same solution relieve chronic inflammation of the lining membrane of the bladder. On the contrary, it has been further long known that a calculus, probably of lithic acid, was broken down and removed by Professor Rutherford and Mr. Butter by free and frequent injections of tepid lime-water into the urinary bladder. Surely the time is not far distant, when a higher chemistry will thus enable us to remove some calculi at least without the horrid necessity of the knife or lithontrite.

8. *The Mucous Surface of the Trachea and Lungs.* In forming carbonic acid for application as a local anæsthetic, I have generally placed together six drachms of crystallised tartaric acid and eight drachms of bicarbonate of soda in a common wine bottle, and added four or five ounces of water. The gas is allowed to escape through a perforated cork, and attached a caoutchouc tube to the part to which it is applied. The conical-shaped perforated cork fixing the flexible caoutchouc tube into the mouth of the bottle, consists centrally of a metallic tube, inclosed in a thin layer of common cork, and the whole sheathed externally with a layer of caoutchouc to render its immediate insertion into the neck of the bottle close and tight fitting. The distal extremity of the caoutchouc is usually provided with a flattened glass tube, which is placed inside the mouth when the carbonic acid is used for inhalation.* In a considerable number of instances of chronic bronchitis, asthma, irritable cough, etc., I have directed the patient to breathe the carbonic acid, which escaped from the above mixture, by placing the end of the tube in his mouth. In a large proportion of these cases the relief obtained has been most striking; and in several chronic instances the benefit has been at once both speedy and permanent. The quantity of gas thus set loose and inhaled is not so very great in quantity as the rapid and continuous rush of it into the patient's mouth would lead a person to suppose; and it acts, I believe in these cases as a local sedative or anæsthetic applied to the whole lining pulmonary membrane, like the smoke of stramonium, or the vapour of chloroform. The common idea that spasm of the glottis will come on whenever carbonic acid is breathed in any considerable quantity, will be found quite incorrect. I will take an early opportunity of stating in the BRITISH MEDICAL JOURNAL the unexpected results of this prac-

* When the gas is applied to the vagina and cervix uteri, the end of the flexible caoutchouc tube is furnished with a gum-elastic extremity, such as is used in vaginal syringes; for the interior of the rectum, I have latterly used a double silver tube; and for the bladder a double silver catheter, fixed to the end of the caoutchouc tube. Mr. Young, cutler, Edinburgh, has made the instruments I have used.

tice; one which, even after all, is, I find, not quite novel, as, in the last century, Dr. Percival tried in phthisis pulmonalis the inspiration of fixed air or carbonic acid "by inhaling the steams of an effervescing mixture of chalk and vinegar, or of vinegar and potash", and Drs. Lettsom, Withering, and Hulme tried a similar method.

9. *External Wounds and Burns.* Seeing, first, the great and speedy relief to pain in cancerous and other sores obtained through the local application of carbonic acid by Ewart and Ingen-Housz; and, second, the tendency to cicatrisation observed even in some malignant ulcers when carbonic acid was kept in contact with them, I ventured in my paper on the subject to suggest the topical employment of carbonic acid to surgical wounds and burns, as at once both relieving suffering, and being one of the best means for producing rapid healing and cicatrisation. If found successful, it would not be difficult to devise simple means of applying it as a constant dressing. But no sufficient experiments, so far as I am aware, have been as yet made upon the matter.

10. *Extraction of Teeth.* I would suggest that perhaps carbonic acid may possibly be yet found useful as a local anæsthetic under a different form, and in a different mode from those already alluded to. Teeth have been now often extracted without pain when the gum was frozen with ice and salt, or ice and muriate of ammonia. But the application of these freezing mixtures, is tedious, difficult, and uncertain. If the chemist could show us a safe, simple, and cheap means of making and keeping *solid* carbonic acid, would not the application of the solid flakes of carbonic acid freeze the gum (or, indeed, any other part to which it was applied) sufficiently to produce the necessary degree of local anæsthesia?

In the preceding remarks I have scarcely referred, except incidentally, to the question of the utility of carbonic acid as a local anæsthetic when applied to various mucous surfaces and exposed external structures. Let me only in the meantime add, that all my subsequent experience has, in my opinion, more than confirmed the views which I ventured to publish two or three years ago with regard to its practical utility and efficiency as a local sedative or anodyne agent. The late observations of Drs. Churchill, Johns, etc., in our own country, and of Follin, Broca, Bernard, etc., in France, all tend further to prove and establish the advantages to be often obtained in practice from the employment of this therapeutic agent as a topical anæsthetic.

ON SOME SEVERE FORMS OF DISEASE ARISING FROM THE RETENTION OF DECAYED TEETH.

By J. C. CLENDON, Esq., Surgeon, Lecturer on Dental Surgery at the Westminster Hospital.

[*Read before the Greenwich Medical Society.*]

[*Concluded from page* 449.]

I MIGHT mention more evils resulting from the retention of diseased teeth, but they would unduly lengthen this paper; I will, therefore, at once proceed to read a few cases I have selected from my notes, to illustrate those I have already pointed out.

CASE I. *Disease in Antrum.* Mr. D., a gentleman about thirty-five years of age, an architect, of tolerable health, but who suffered occasionally from chronic catarrh, had during the last six months expectorated a considerable quantity of fœtid pus or mucus mixed with blood on rising from his bed in the morning. Having lost several members of his family from tubercular disease, he naturally became uneasy, and consulted his usual medical attendant, who prescribed for his cough, but failed to discover the source of the complaint.

He subsequently saw Mr. Holt, one of the surgeons to the Westminster Hospital, who, from the history of the case, at once suspected the cause of the malady, and recommended him to apply to me that his teeth might be thoroughly and carefully examined. The teeth seemed in tolerable order, and quite free from pain; but there was one, the first superior molar, that attracted my notice, not so much from the fact of its having been stopped, as from its displacement from the line of the neighbouring teeth, and its tenderness on pressure. He allowed me to extract it, when I found a fibrous growth of the size of a hazel-nut attached by a pedicle to the extremity of the root. This growth had made room for itself by penetrating the floor of the antrum, and by its presence there had set up inflammation in the lining membrane. The sanguineo-purulent secretion, the result of the inflammation, accumulating and filling the antrum during the day, found its way during sleep, when the body was in a recumbent posture, through the natural opening into the middle meatus of the nose, and thence by the posterior nares into the throat, to be coughed up on the patient's resuming the erect position in the morning.

No pus followed the removal of the tooth, proving that the tumour was under the membrane, and not actually within the antrum. I pierced the membrane with a trocar, and found it thick, tough, and difficult to penetrate; but when it was freely open, a tablespoonful or more of very fœtid pus made its escape.

I washed out the antrum with warm water, and injected it occasionally with a weak solution of sulphate of zinc. In the course of three weeks or a month, to the great relief of the patient's mind, the discharge (and the cough) had entirely subsided.

CASE II. *Tumour: an Encysted Abscess in the Cheek.* Mary Overall, aged 24, waistcoat-maker, a healthy, good looking young woman, with a tumour or swelling of the right cheek, came under my care, last November, at the Westminster Hospital. The application was well-timed, for the tumour fluctuated on pressure, and seemed, from its nipple-like protrusion, just about to burst outwardly; the skin over it was tense, but not at all discoloured. On grasping the tumour with a finger and thumb placed inside and outside the cheek, a thickened sac, of about the size and form of an oyster, could easily be traced in a position corresponding with the buccinator muscle. In the upper jaw were the roots of two decayed teeth, a second bicuspid and a first molar, but the patient was "quite sure these had nothing to do with it, as she had never had pain in them, and the swelling had been coming on gradually during the last twelve months from a cold caught in the face, while crossing over from Dublin." I thought it better to remove these teeth notwithstanding, when through the opening thus made the sac immediately emptied itself and filled the mouth. The pressure of the tumour in the cheek or of the pus in the antrum, or both together, had led to the destruction of the outer wall of the maxilla; the gum hung loosely over the cavity, and I could easily pass my finger under it into the antrum. The sac was exceedingly thick; it has taken months to absorb, but is now disappearing, and the cavity in the jaw is filling up; while, the face being naturally round and plump, I do not anticipate any permanent deformity.

CASE III. *Facial Neuralgia, or true Tic Douloureux.* On my arrival in town one morning I was hastily summoned to a lady suffering from facial neuralgia. She was about thirty-four years of age, tall and handsome, the wife of an official in one of the Indian presidencies. She had a young family, and, with the exception of severe periodical attacks of tic douloureux, her health was good. The attacks in question were attributed to ague, intermittent fever, and long residence in India; but after having heard her own history of the case, and having had an opportunity of examining her mouth, I referred them to a totally different cause.

On the occasion in question the attack had come on suddenly during the night, and at the time of my visit the eye was quite closed, and the face and head so swollen, that it was impossible to recognise her; she looked as if she had been suffering some days from erysipelas. She was attended by an old friend, Dr. Wallace, of Carshalton, a retired medical officer of the Indian army. Expressing my conviction that two molar teeth, which I pointed out, were the sole cause of her suffering, Dr. Wallace concurred with me in the propriety of my removing them; a proceeding to which the patient for some time objected, as "the teeth had been stopped for several years, and had not given her pain or uneasiness." They were, however, removed; the pain immediately ceased, and by the next day all the symptoms had disappeared.

In this case, the pain arose entirely from the deposit of cementum in a cavity not large enough to contain it. I preserved and made sections of the teeth in question, and they are here for your inspection. You will perceive they have both been stopped with ordinary amalgam, but that the arrest of the decay is due to the cementum; it surrounds and blocks the decay, entirely fills up the cavity that originally contained the pulp, and envelopes in a solid mass the three roots of the teeth, the ivory-like structure of the latter being easily traced in the midst of the surrounding bone. Now, there was not a trace of vascular tissue in or about the tooth, save in the periosteum enveloping the bone; and to the pressure of the deposit on the periosteum, and the resistance offered to it by the surrounding alveolus, I attribute all the suffering and its results.

At all events, the removal of the teeth effected a cure. She had no return of the pain while in England; and some time after her arrival in India she wrote, as she said, "gratefully to tell me she had had no return of the malady."

CASE IV. *Neuralgia, from Deposit of Bone in the Jaw.* J. A., about fifty years of age, a house carpenter, had suffered so constantly from facial neuralgia for two years, that he had been unable to follow his usual occupation; he had been under private medical treatment, and also at a dispensary in Pimlico, and was then admitted at the Westminster Hospital under the care of Dr. Kingston. Now, Dr. Kingston is one who believes in the local origin of the great majority of these complaints, and makes a point never to order medicine until the mouth has been carefully and thoroughly examined by some one in whom he has confidence; and with this view he brought the patient to me.

I found the teeth were, as the patient averred, all sound and perfect in their arrangement, but there was one, a molar tooth, more sensitive on percussion than its fellows, and that tooth I extracted. The cause of the evil was manifest; the roots were being gradually absorbed, owing to pressure in the socket; they presented just the same appearance as the roots of the temporary when removed by the advance of the permanent teeth. No medicine was needed or given. He called on me at the Hospital some months afterwards, to say he had had no repetition of the pain; and as I have not had a visit from him since, I presume he continues well.

CASE V. *Neuralgia, with Permanent Contraction of some of the Facial Muscles.* A young lady, the daughter of a clergyman, at school at Kensington, was brought to me by request of her family medical attendant, Mr. Robert Ceely, of Aylesbury. She was about sixteen years of age, and very tall, having grown rapidly. For the last two years she had suffered incessantly with her teeth, and on the right side of the face some of the muscles were affected by the constant irritation, the corner of the mouth being drawn up, and the eyelids contracted. I found her mouth full of decayed and decaying teeth; with the exception of the six lower front and the two canines in the upper jaw, they were all so much diseased as not, under any circumstances, to be worth preserving; but seeing how long she had suffered, and was likely to do as long as the vestige of a diseased tooth remained, I recommended their instant removal. This was a sad alternative for a young lady of sixteen, but the necessity for the step was self-evident; for her own part, "she had suffered so much that she was only too glad to get rid of them;" and there is no doubt that, apart from other considerations, healthy gums are far more useful for the purposes of mastication than tender and decayed teeth. All the decayed teeth were removed under chloroform in two operations; and when the gums were sufficiently healed artificial teeth were substituted. Three years have now elapsed since the operations; during the interval I have seen her occasionally; she has remained quite free from pain; but some amount of the old deformity, arising from the contraction of the muscles, still remains, and is, I fear, permanent.

CASE VI. *Abscesses in the Face.* A respectable tradesman in the country came to town for advice, and was recommended by his medical attendant to call on me. The patient, a steady man, of spare habit, about forty years of age, had been troubled during the previous twelve months with a succession of abscesses in the left side of the face. These, as they formed, had been fomented and poulticed, and in due time had either been opened by lancing, or made an opening for themselves through the integuments of the face. At the time of his first visit there were four ragged orifices through which small quantities of pus were continually oozing, and into either of which the little finger would enter, while the surrounding integument was thickened and boggy to the touch, with that peculiar discoloration which is so characteristic of the presence of diseased bone. Although the orifices were widely separated, a probe passed into either led to one spot only, namely, to the posterior molar teeth of the upper jaw; and in that locality I found two or three diseased roots deeply imbedded in a thickened mass of fungoid gum. These roots I removed, together with several small portions of carious bone.

When I last saw him, six weeks or two months after the operation, two orifices were still open and discharging pus, and small portions of carious bone were occasionally coming away. The closed orifices have, in healing, contracted, and bound the integument to the subjacent tissue, each one forming a cup-like depression with a ragged cicatrix in the centre, the cheek presenting the appearance of having been riddled by musket balls.

In this case, had I been aware of the extent of the diseased bone, I should, in the first instance, have urged its entire removal.

CASE VII. *Abscess and Paralysis of the Face.* R. W., aged 34, harness-maker, gave me the following history:—"In January last (1857) I felt pain in the ear, which began to discharge; then an abscess formed in front of the ear; this was lanced at the Northern Dispensary, and it continued to discharge freely for a week or more. Having lost the hearing on that side, I went to the Ear Infirmary in Soho Square for two months, without any benefit. Discharge of the abscess through the ear continued until December. I then first began to feel severe pain when I attempted to move the jaw; this was followed by inability to close the eye, or to put out my tongue. In that state I came to this (the Westminster) Hospital in January last, and was admitted under the care of Dr. Reynolds."

From the constant pain and tenderness on pressure, Dr. Reynolds, suspecting some local cause of irritation, sent him to me, in order that his mouth might be carefully examined. When I first saw him, there was great difficulty in opening his mouth; severe pain in the condyle when he attempted to move the lower jaw, on pressure being made in that direction; he was unable to close the eyelids, to contract the orbicular muscle of the eye, to inflate the cheek, or to protrude the tongue beyond the front teeth, gasping when he endeavoured to do it. On attempting to whistle, the mouth and nostrils were drawn to the opposite side; the external meatus of the ear was so contracted that a fine probe only would pass; and through the orifice, on pressure being made on the cheek, pus oozed out. He had no toothache, nor decayed tooth that he knew of; but I found the teeth on the affected side encrusted with tartar, from want of use. This to me is always a suspicious circumstance. He attributed it to pain in the hinge of the jaw in eating, and to his inability to remove the food from the cheek, owing to the paralysis of the muscles. On passing a curved instrument under the gum between two molar teeth, he felt some pain in one tooth; and, repeating the experiment with the same result, I determined to remove it. There was a cavity in it, quite out of sight, and almost out of reach, through which, I have no doubt, air had from the first freely passed, and given rise to all the mischief. On washing out the mouth, he at once expressed a sense of relief; found he could open his mouth easily; and, to the surprise of all present, he could protrude his tongue to the full extent without any apparent effort, and also partially close the eye. The relief might be described as instantaneous. The inability to contract the muscles of the mouth, to inflate both cheeks, and raise the angle of the mouth, still continues; and, although it is asserted that in the severest lesions the nerves do not slough, I nevertheless expect some branches of the portio dura have been destroyed in the long continued abscess, and that loss of power in some of the muscles, as well as of hearing, on that side, are permanent and irremediable.

CASE VIII. *Disease of Bone and Abscess in the Face, from Retention of Diseased Teeth.* The last case I will bring under your notice is one from this immediate neighbourhood, and it has attracted some little attention. The patient was Thomas Harcourt, aged 45, carpenter, of St. John's Terrace, Lewisham Road. I will give the history in his own words.

"In January 1857, I went to bed quite well, and, when I awoke in the morning, I found my jaw was closed and my teeth clenched. I could not open my mouth. I had no toothache, nor bad teeth that I knew of, but fancied it was owing to the dampness of the house. I called on Dr. Edward Downing, who gave me some medicine. My face began to swell, and a large abscess to form in the cheek in front of the ear. I was told to poultice it. In about a month or so, it burst of itself, and the matter escaped out of my mouth between the front teeth. The discharge continued night and day for about three months; I should think, as much as a teacupful in twenty-four hours. In April I went to Guy's Hospital, and remained an out-patient for about a month, under the care of one of the assistant-surgeons, who gave me an ointment for my face, and some medicine to swallow; but, getting no better, I left off going. During the whole of this time, my mouth had never been opened. I lived upon suction, my teeth being clenched. I had done no work since January last; I was too ill to do any. I saw Dr. Edward Downing again, and, about the end of July, he gave me his card, and desired me to call on you at the Westminster Hospital."

This was his history. At the time of his calling on me, his countenance was sallow, and he was much emaciated: not at all

surprising, when the fact of his not having tasted solid food for six months, and the amount of the discharge during the same period, are taken into consideration. He was equally depressed in spirits. He had been prayed for in church for some months, and seemed to have made up his mind he could not live much longer. The first thing to do was, what had been so long neglected, namely, to open his mouth to make an examination; and this I effected with a series of screws and wedges, gradually increasing in size, and applied at the same moment on both sides of the mouth. I had offered him chloroform, but he declined, saying "he was ready to bear any amount of pain likely to do him good". It must have been severe, but he did bear it, manfully. On passing in my finger, the cause of the mischief was at once evident: two superior molar teeth, decayed and dead, lay imbedded in a portion of necrosed bone; the whole firmly held *in situ* by the closure of the jaw, and no effort of nature could ever have removed it, save through the abscess in the cheek. An elevator separated the mass, and turned it out of the mouth without much difficulty. After washing out his mouth, he found he could voluntarily open it to the same extent I had forced it. This is a remarkable feature in these cases. I used to imagine the rigidity was due to the ligaments of the joint, but I am now quite satisfied it is owing to the contraction of the masseter or internal pterygoid muscle, the weak depressors of the lower jaw being quite useless to antagonise it; and the moment the cause of irritation is removed, the muscle is relaxed, and the jaw opens freely.

About three weeks subsequently, a piece more bone exfoliated; and from that time his recovery was rapid. I saw him last week. His health seems good. There is a slight depression in the cheek, corresponding to the loss of the bone, but nothing approaching to a deformity.

Now, in all these cases, whatever the symptoms, and whether the pain be severe, mitigated, or altogether absent, there is throughout but one indication—namely, an effort of nature to get rid of the offending body, which we, if we would endeavour wisely to assist and second instead of to counteract her, ought at once to seek out and remove.

But here is the difficulty. The patient has a dread of the operation, and will run all risks, submit to any other course of treatment, or any amount of suffering, rather than undergo it. An old lady of seventy once old me that, from her earliest recollection down to the period when the last remaining tooth had worked its own way out, she had seldom been free from pain for a month together; and yet she could never summon courage to submit to the operation of extraction: in her own emphatic words, "she felt she must die first". But in severe cases, where there is great tenderness or pain, or where the operation would be more than usually painful and difficult to perform, chloroform will deprive the patient of all excuse, and prove a great blessing. It allows the practitioner to open and examine the mouth carefully, perhaps for the first time; and then, at his leisure, to seek for and remove all that he deems necessary. It is true that, owing to some few casualties, which from the first I anticipated, some persons have as much dread of chloroform as of the operation itself; but my experience in some three thousand cases, taken indiscriminately, and extending over a period of more than ten years, satisfies me that, although, like all powerful agents, it is dangerous if misused, it can always be given with safety if administered with proper care. I can truly aver that, until the other day, when, in a case of protracted operation at the shoulder-joint, much blood being lost, syncope came on while the patient was fully under the influence of the chloroform, but which was detected and counteracted on the instant, I have not had one case which, during its administration or subsequently, ever gave me a moment's uneasiness.

Often, however, there is another difficulty; and that is on the part of the practitioner. Perhaps he examines the mouth, and ascertains the cause of the pain to be the root of a tooth broken off and buried deeply in the gum, or he finds a number of roots clustered together, presenting no tangible surface for the grasp of an instrument, and difficult to reach even with an elevator. He sees they ought to be removed, but shrinks from the task. To use a familiar phrase, "he does not like the look of them"; and therefore recommends some palliative mode of treatment, and patience. In point of fact, from not feeling quite equal to the emergency, or wanting confidence in the use of the instrument, he is reluctantly compelled to leave his patient to an indefinite period of suffering, and perhaps to some of the evil results I have already pointed out. This abnegation of his legitimate functions, arising purely from want of confidence in himself, has notoriously had the effect of driving this department of surgery into the hands of unqualified and often uneducated practitioners, styling themselves *surgeon*-dentists, and affecting to consider the mouth as their own legitimate domain, to which the surgeon has no claim. But, whatever the cause, the result is the same; for now the old story is repeated; the cheek swells, pus forms, and there is either a circumscribed or diffused abscess. This is poulticed, to promote absorption, or to assist resolution, as the case may be. Now, I cannot too forcibly insist that fomenting the cheek under such circumstances is the most erroneous step of all; for, should the abscess point outwardly, there will be a sinus from which pus may continue to flow, perhaps for a year or more, as long as there is any root or carious bone to exfoliate, leaving, when healed, a deep pit or cicatrix in the cheek, which disfigures the patient for life. This is not a pleasant alternative for a man, but a very serious drawback to a woman, in the preservation of whose good looks we all feel a natural interest. The tooth should be removed, when the pus will immediately flow through the aperture thus made; or, failing that, hot water, or hot bread and water fomentations, should be used *in* the mouth; and, as soon as possible, the abscess, however deeply seated, should be opened freely through the mucous membrane, and the pus allowed to escape *into the mouth.*

In conclusion, I think no one will deny that it should be a part of a medical man's education to know how to deal with such cases; and I trust that all you who have kindly gone with me through these observations will have felt their interest and importance; and, seeing how much suffering and mischief may spring from so small a cause as a diseased tooth, you will sympathise in my earnest wish to obtain the diffusion of more enlightened views on this much neglected, and therefore little understood department of surgery. Every day confirms my experience of its necessity, and strengthens my desire to see it accomplished. Many complaints, that come under the notice of the practitioner as diseases of the body, are in reality diseases of the teeth. It is clearly impossible to treat the body as a whole, if we are ignorant of its parts; and I will venture to say there is no part much more widely and universally affecting the general system than that of the teeth.

APPLICATION OF BELLADONNA AS AN ANTILACTESCENT.

By HENRY G. TREND, Esq.

IN the JOURNAL of May 29th last, some very interesting remarks appeared upon the use of belladonna in checking the secretion of milk, from the pen of Mr. Newman of Fulbeck, near Grantham; and as I am in a position to clear up some few doubts which that gentleman seems to entertain as to its effect upon one breast only, and also upon the infant, I have thought it worth while to make a few observations thereon.

In the early part of this year, I had two cases in which I deemed it advisable to check the secretion of milk in one breast; one from threatening abscess, the other from excessively tender nipples. In both cases, I allowed *the infant to continue* at the other breast; there was an abundant supply of milk, and neither of the children had a single bad symptom. The breast operated upon, in each case, soon resumed its natural size.

I have used the belladonna now more than a dozen times, and have seen it fail but once; and, even in that case, it considerably relieved that intense suffering which lacteal abscess invariably causes. I firmly believe that if ladies would but mention the first precursory symptoms of these abscesses to their medical attendants, instead of to some meddlesome, ignorant old woman, "bad breasts" would, by the use of belladonna, gradually be numbered among the things that were.

THE HEALTH OF PARIS. The *Gazette Hebdomadaire de Médecine* of June 4th, says:—Paris presents at this time a striking example of the rapidity with which atmospheric changes exert their influence on the public health. The hot weather has scarcely set in more than five or six days; and already there have been met with, in private practice, a large proportion of cases of intestinal disorder, especially diarrhœa. We have taken care to ascertain that many of the persons attacked had not yet tasted any of the fruits of the season; there has therefore been a true *constitutio medica*, connected, there can be no doubt, with the elevation of the temperature.

Abstract of Lectures

ON THE

PHYSIOLOGY OF THE NERVOUS SYSTEM.

DELIVERED AT THE

ROYAL COLLEGE OF SURGEONS.

BY E. BROWN-SEQUARD, M.D.

[*From Notes by* ALEXANDER HENRY, M.D.]

LECTURE II.

IN the last lecture, it was endeavoured to show that the transmission of sensitive impressions does not take place through the posterior columns of the cord, but chiefly through the grey matter, and in part by the anterior columns. The most decisive experiments are those which shew that section of the posterior columns is followed by an apparent *increase* of sensibility; and that a section of all the cord except the posterior columns is followed by loss of sensibility. These two experiments are decisive: but the latter most so.

What is the part which transmits sensitive impressions? If the cord be divided transversely, except a small connecting bridge of grey matter, sensation remains in all the parts of the body behind the section. It must, therefore, be transmitted by the portion of grey matter which remains undivided. It must be observed, however, that in this experiment, sensibility is somewhat diminished; but we must remember that, in dividing the whole of the white substance of the cord, a part of the grey matter has necessarily been cut through. If, on the other hand, the anterior, posterior, or lateral columns alone be respectively divided in different animals, we shall find in each that sensibility remains entire, and is even apparently increased.

The grey matter is not the only channel through which sensitive impressions are transmitted. The anterior columns have a share in this function. This is greatly in opposition to the general view, that the anterior columns have no sensory fibres going to the brain; but it is borne out by pathological facts. We must, therefore, admit the share of the anterior columns in transmitting sensations. But the grey matter has the greatest share in this duty. If we divide the cord by two incisions, each passing from the posterior column of one side to the anterior column of the opposite side, and make a transverse section behind the portion of grey matter remaining in the centre, nothing is left except the anterior columns and a small part of the grey matter. When the animal has recovered from the disturbance of breathing, etc., which attends the experiment, sensation returns, though in a limited degree, in all the parts behind the section.

In what part of the Cerebro-Spinal Axis do the Fibres conveying Sensitive Impressions make their Decussation? Sir Charles Bell believed that the decussation was in the upper part of the medulla oblongata, and in the pons Varolii. Longet supposed that it was where the anterior peduncles of the cerebellum reach the corpora quadrigemina. But the decussation really takes place in the spinal cord itself. This may be proved both by experiments on animals, and by pathological facts occurring in man.

For many centuries it has been asserted that injury on one side of the brain produces paralysis of the opposite side of the body. Galen pointed out this, and performed some experiments, the results of which, to a certain extent, he observed correctly. He made a section of the lateral half of the spinal cord in a pig: paralysis of *motion* on the same side occurred, but he says nothing of *sensation*. In another experiment, Galen divided the cord longitudinally: the animal retained the power of motion, but here again there is nothing said of sensation. He concludes that there is no crossing of "nerves" in the spinal cord. It seems strange, that every one up to the present time has taken these experiments of Galen as proving the absence of decussation in the cord for sensory fibres as well as for motor. But if a proper examination were made, in the first of Galen's experiments, there would be found no loss of sensation on the side where the transverse section was made; while sensibility would be entirely destroyed by the longitudinal division of the cord. The right lateral half of the cord has been divided in a rabbit; in the right hind limb, motion is lost, but sensation is increased; in the left, there is loss of sensation, but no paralysis of motion. If, in the same animal, another section be made, of the left lateral half of the cord in the cervical region, sensation is lost in both hind limbs, and in the right fore limb. This proves that sensation was transmitted by the left half of the cord after section of the right half.

Several other experiments show the decussation of sensory fibres within the cord. If Galen's experiment of dividing the spinal cord longitudinally be performed, the animal retains power of voluntary motion in both limbs, but has not the least remnant of sensibility. It is entirely lost, whatever be the means of irritation we apply to the limbs. This loss of sensibility may be attributed by some to the great constitutional disturbance attending the operation. If this were a sufficient cause, sensation should be impaired in the anterior limbs as well; it is so for a time, but it returns; while in the hinder limbs it is entirely destroyed. The retention of voluntary power is another proof that shock will not account for the loss of sensation.

If a longitudinal section of the cord be made in the cervico-dorsal region, sensibility is lost in the anterior and not in the posterior limbs. The decussation of the sensory fibres proceeding from the posterior limbs takes place in the lumbar region of the cord; and hence these parts retain sensation. If, in addition, one lateral half of the cord be divided, there will be loss of sensibility in the hind limb of the opposite side, while that of the same side with the section will be in a state of hyperæsthesia.

If experiments on animals were our only guide, we could not be absolutely sure that the same thing occurred in man. But there have been many cases in the human subject which go to prove that the facts here pointed out occur in man also—and not only with regard to sensation of pain, but also as respects tactile sensibility, the sensation of heat and cold, etc. In animals, indeed, we to some extent find tactile sensibility affected in the same way as the sensation of pain. If the eyes of a dog, in which a lateral half of the cord has been divided, be bandaged, and the hyperæsthetic limb be irritated, the animal will not only feel pain, but will know what part is irritated, and will turn its head to bite.

Pathological Evidence of Transmission of Sensitive Impressions through the Grey Matter. Longet some time ago tried to prove, by pathological observation on the human subject, that sensitive impressions are transmitted by the posterior columns of the cord. One case he acknowledged to be opposed to his view; viz., an instance noticed by Cruveilhier, where the posterior columns were softened, but sensibility was not diminished, while the power of voluntary movement was impaired. Longet objects, that nothing is said of the brain; and that, therefore, the case proves nothing. But the actual observation of disease of the posterior columns with retention of sensation is sufficient. Longet brings forward five other cases in support of his opinion. But on these Dr. Todd made some very correct remarks in 1843. He pointed out that, in four of them, there was injury of the posterior roots of the nerve; and that, therefore, nothing could be proved from them respecting the function of the posterior columns.

The cases that can prove anything are those in which the posterior roots have remained entire, or nearly so. There are thirty-eight cases of this kind on record, in which sensibility remained, showing that there was no lesion of the posterior roots. In many of these, however, the state of the patient was not examined within a short time before death; and it is somewhat difficult to prove that softening, when present, may not be a *post mortem* phenomenon, or at least produced during the last hours of life. Yet, if there be found no other lesion than an alteration of the posterior columns, while during life there has been no loss of sensation, we cannot but conclude that the posterior columns have not conveyed the sensation. There are, however, cases where tumours have been found pressing on the posterior columns, and where sensation has remained. There can be no room for doubt in these cases; for the tumours must have existed long before death.

Again, there have been observed instances in which hæmorrhage has taken place into the central grey matter, leaving the white substance; as well as at least two cases of tumour in the centre of the cord, destroying the grey matter; and in these sensation has been quite lost. Instances have been also recorded where both the anterior and the posterior columns have been destroyed, the grey matter remaining: in these, sensibility has been retained.

Cases have been described, where the grey matter has been found in a "diffluent" condition, and sensation has been re-

tained. But the want of precision in the use of the word "diffluent" greatly diminishes the value of these cases.

Pathological Facts proving Decussation of the Sensitive Fibres in the Spinal Cord. If the decussation took place in the pons Varolii, a tumour pressing on one side of this would produce paralysis of sensation on both sides of the body: but sensation is lost on the opposite side only. Again, if the decussation were made *above* the pons, the pressure of a tumour on this part of the encephalon would produce loss of sensation on the same side; but at least seventeen cases have been recorded where the loss of sensation has been on the opposite side of the body.

The same reasoning applies to the medulla oblongata as to the pons Varolii.

In the cord itself there have been several instances of injury on one side, attended by loss of sensibility on the other.

Reviews and Notices.

The Human Mind in its Relations with the Brain and Nervous System. By Daniel Noble, M.D., Visiting Physician to the Clifton Hall Retreat, etc. pp. 157. London: Churchill. 1858.

An Essay on Physiological Psychology. By Robert Dunn, F.R.C.S.Eng., etc. pp. 94. London: Churchill. 1858.

Dr. Noble's book is an expansion of one of the earlier chapters of his excellent work on *Psychological Medicine*. In it he treats, in as simple language as the subject will admit, of the various mental phenomena, and their relations to the encephalon. The book is one which will instruct the general as well as the strictly professional reader; and the established reputation of the author as a psychologist will lead to his opinions being regarded with high respect.

Mr. Dunn does not employ such simple language as Dr. Noble, and his work is therefore more suited for the strictly professional student of psychology. We will only remark on it, that it bears the undoubted character of being the work of an observant and reflective mind.

We recommend all who are interested in the study of mental physiology to carefully read the works both of Dr. Noble and Mr. Dunn. In comparing and reflecting on the doctrines set forth in them, they will not fail to attain much knowledge, of the most interesting character. And on many the perusal of these works will serve to impress the fact of the necessary connexion between the state of the mind and of its material organ —a fact important to be remembered, but which is too often neglected.

Mémoire sur l'Anatomie Pathologique des Rétrécissements de l'Urèthre. Par José Pró, Docteur en Médecine de la Faculté de Paris. pp. 122. Paris: 1856.

M. Pró informs his readers that, in consequence of a recommendation made in 1854 by M. Malgaigne to study the valuable preparations illustrative of urethral structure which are contained in the London museums, he visited this country, and made notes of a number of the specimens. Thus fortified, he proceeded to write a book, containing an account of the normal anatomy of the urethra; an analysis of the principal ancient and modern authors who have written on stricture; conclusions drawn especially from "our own observations"—this part forming the body of the work; and a description of one hundred and twenty-seven anatomico-pathological specimens to be found in the London museums.

It is the part of the work containing the author's "conclusions" that we wish especially to notice. He introduces it, after his historical sketch, by saying, "We will make known what our own observations have taught us." This division occupies twenty-six pages; and of these, all except two or three pages at most consist of a very exact translation of most of the second chapter of a work published in 1854 by Mr. Henry Thompson, on *The Pathology and Treatment of Stricture of the Urethra*. To make the matter plain, we copy from each work an extract—as a fair specimen only of what exists in abundance.

Thompson.

"John Hunter records an instance in which he met with *six* strictures in one urethra; Lallemand mentions one with *seven;* Colot saw one with *eight;* Ducamp says there are rarely more than two, but that he has seen *four* or *five*. Boyer thought *three* could exist together. A case is reported by Leroy d'Etiolles, in which he found *eleven;* but, since this is sometimes quoted as if it were a *post mortem* observation, it is necessary to state that this number rests only on the evidence afforded by the passage of an exploratory bougie (that is, a small gum elastic sound, with an olive-shaped extremity, two or three sizes larger than that of the stem) in the person of a *living* patient. The strictures, acording to his account, were '*for the most part in the spongy portion, about two and a quarter lines distant from one another*'; a condition of things which would be better described as a series of irregular contractions, than by any statement of the exact number of strictures.

["Rokitansky speaks of four, and does not record a higher number as having come under his own personal observation.]

"My own researches have not led me to recognise numerous independent strictures in one urethra. Three, or the most four, *distinct* contractions, is the highest number I have been able to discover. A few examples of urethra greatly contracted, from the meatus externus almost to the membranous portion, are in existence; but these do not exhibit a multiplicity of strictures, so much as general thickening and coarctation of the canal." (pp. 57-8.)

Pró.

["*Nombre des rétrécissements.* En examinant les auteurs, nous avons remarqué qu'ils varient à propos du nombre des rétrécissements qu'on trouve dans un même urèthre;] ainsi Hunter cite un cas où il y avait 6 rétrécissements; Lallemand cite un cas de 7; Colot, un de 8; Ducamp prétend qu'il y en a rarement plus de 2, mais qu'il a vu des cas de 4 ou 5; Boyer n'en admettait pas plus de 3; M. Leroy d'Etiolles dit en avoir vu 11 chez un jeune Sicilien, mais ce dernier compte d'après le cathétérisme et non pas d'après l'autopsie. De l'aveu de cet auteur, ces rétrécissements se trouvaient pour la plupart dans la portion spongieuse, séparés les uns des autres par une distance de 2 lignes et quart. Pour nous c'était une série de contractions irrégulières de un même rétrécissement plutôt qu'autant de différents rétrécissements; nos propres recherches, basées, comme on le voit d'après notre thèse, sur un grand nombre de faits, ne nous permettent pas d'admettre un aussi grand nombre de rétrécissements dans un seul urèthre; 3 et tout au plus 4 rétrécissements distincts, tel est ce que nous avons trouvé. On a cité quelques exemples d'urèthres rétrécis du méat urinaire à la portion membraneuse; ce ne sont pas des preuves de rétrécissements aussi multipliés, mais bien un épaissement général et irrégulier du canal." (p. 50.)

We have inclosed within brackets those passages which do not find a parallel.

It is a curious fact, that in his sketch of ancient and modern writers on stricture, M. Pró makes no mention of Mr. Thompson; yet, in his description of "our own observations", he sometimes quotes the English surgeon incidentally by name, as making certain remarks.

The distinguishing characteristic of M. Pró's work must now be evident. It is one of the richest examples of impudent plagiarism with which we have ever met. If a man coolly appropriates to himself a considerable portion of his neighbour's substantial goods, the act gains for its perpetrator a reputation more notorious than enviable: and what opinion save one can be entertained, in a moral point of view, of the deliberate appropriation of the labours of a man's intellect?

M. Pró's work is dedicated to Messrs. Robin and Nélaton. We are sure that these distinguished surgeons will, as soon as they become aware of the real circumstances of the case, be ready to give our countryman his due, and to repudiate the very questionable honour which M. Pró has conferred on them.

British Medical Journal.

SATURDAY, JUNE 12TH, 1858.

THE MEDICAL REFORM BILL: THE SALE OF POISONS BILL.

IF it should be the fate of Lord Derby's Government to pass a Medical Reform Bill and a Sale of Poisons Bill, our profession will have to thank him for setting at rest two questions which have been perpetually seeking solution during the present century, and as frequently eluding it. Mr. Walpole was to have committed his Bill on Tuesday last; but, as he could not complete the clauses by that date, he has postponed his measure until the 22nd instant. We have great pleasure in being able to add, that, to the best of our belief, the alterations which the Home Secretary proposes to make in Mr. Cowper's Bill will be generally acceptable to the profession, and that there is no reason whatever to doubt that a Medical Reform Bill will pass into law this session.

With respect to the Sale of Poisons Bill, the Premier passed it through the second reading, without any opposition, on Friday, the 4th instant; and, in all probability, it will speedily pass into a law of the land. Lord Derby appears to have reconciled very adroitly the conflicting claims of trade and public safety in this measure, and to have produced a Bill that will work without too much friction. He has divided poisons into two classes. The first class, consisting of those not generally used by the public except for criminal purposes, of which a schedule is given, will not be obtainable after the passing of this Bill, except by persons of full age, who shall be known to the person selling them, and whose names shall be signed in a book. The stranger must produce a certificate signed by a householder, stating that he knows the person to whom the sale is to be made. This provision, although it will not prevent the cool and determined suicide from accomplishing his end, will nevertheless present very many obstacles to that class of persons who attempt their lives either in a fit of drunkenness, passion, or upon some sudden impulse. It will also throw great difficulties in the way of the would-be poisoner, and render the approach to crime as difficult as it is at present facile. In the second category Lord Derby places those poisonous drugs in general use as medicines, such as opium, tartar emetic, and chloroform. The stringent provisions applying to the first class of poisons could not well be applied to these familiar medicines, without destroying certain branches of commerce, and without interfering too much with the legitimate wants of the public. But it is quite evident that restrictions of a certain kind are here even more imperatively called for than in the first class of poisons. There are a hundredfold more deaths perpetrated by opium and its various preparations, for instance, than by such recondite poisons as prussic acid and strychnine. We all know of such things as "quietness", sold by grocers' apprentices of tender age to all comers, and no questions asked. The deaths, wilful or accidental, produced by means of this agent, or of its first cousins, Daffy's Elixir and Dalby's Carminative, if they could only be set forth in the Registrar-General's Report, would appal the country. Now, however, they are covered by such terms as "fits", "teething", etc.

To prevent, as far as possible, the perpetration of this wholesale system of poisoning the poor through the agency of ignorant tradesmen, this Bill provides that, for the future, no person shall be permitted to sell poisons of either class without possessing a license, which shall only be granted after an examination of the party by properly qualified examiners. All persons who for the space of one year prior to the passing of this Bill shall have been engaged in the sale of poisons, will be licensed to carry on their business for a period of five years; but this license will not be renewed at the expiration of that time, unless the party submit himself to an examination. The effect of this clause will, we trust, be to remove the sale of these poisonous drugs entirely from the hands of grocers, oilmen, etc., as it is not likely that such persons will submit themselves to an examination in matters far out of their ordinary beat for the sake of the small profit they would obtain by their sale. In order to provide as far as possible against those distressing cases of accidental poisoning which every now and then startle the public, the Bill directs that all persons selling poisons shall be required to keep them distinct and separate from other drugs. And, in order to enforce this provision, the examiners are empowered to visit such shops in order to ascertain if the requirements of the Bill are complied with, and pecuniary penalties are to be the punishment of their infringement. The clause, however, which will make the vendor most careful of the subordinates he employs in selling these drugs, is the one which renders him personally liable for improper sales made by them. We predict that we shall be shocked no more, after the passing of this Bill, by hearing of valuable lives in an instant destroyed by ignorant apprentices, who have not yet learned the abbreviations on their masters' bottles.

THE WEEK.

WE regret to state that our respected treasurer, Sir Charles Hastings, met with an accident on Friday, the 4th inst., which might have had very serious results. He was driving in the neighbourhood of Worcester on the day in question, when the carriage was overturned and fell upon him. Fortunately, the most serious injury he received was a fracture of the left collar bone. The accident has not prevented his travelling, however, as he was in town on Thursday last, although not well enough to attend the Medical Benevolent Fund dinner, which he otherwise would have done. Our Associates will rejoice exceedingly to hear of his fortunate escape.

The Adjourned Annual General Meeting of the Governors of the Royal Medical Benevolent College was held on Tuesday last at the Freemasons' Tavern. The President of the College, Earl Manvers, occupied the chair. A ballot was taken for the election of new members of the Council; and at its close the following gentlemen were declared to be elected.

	Votes.		Votes.
T. B. Curling, Esq.	245	G. Fincham, Esq.	201
R. Quain, Esq.	245	R. D. Edgcumbe, Esq.	200
E. Ray, Esq.	245	C. F. J. Lord, Esq.	200
Jos. Ward, Esq.	243	H. Sterry, Esq.	200
H. Blenkarne, Esq.	201	R. Dunn, Esq.	198

Of these gentlemen, Messrs. Curling, Quain, Ray, and Ward were both on the list recommended by the Council and on Mr. Cattlin's list: the remaining six were on the Council list alone. The six gentlemen whose names were in Mr. Cattlin's list alone were in a minority: viz.,

	Votes.		Votes.
E. Ballard, M.D.	46	C. P. Croft, M.D.	44
W. Munk, M.D.	45	J. Warwick, Esq.	44
T. Pollock, Esq.	45	J. F. Harding, Esq.	39

It is to be hoped that, whatever reason there may have been for differences of opinion, matters will be allowed to "shake themselves right;" and that the usefulness of the Royal Medical Benevolent College will not be endangered by the dissensions of its supporters. We are sorry to observe, however, that the general merit of the question at issue has been somewhat obscured by personal references. Mr. Propert, it appears from the copy of his letter published at p. 487, designated the opposition as "ungrateful" to himself, and threatened resignation unless the Council were supported. In thus making this appeal to the personal gratitude of the Governors, he acted, we think, not altogether judiciously. His reputation as the faithful and zealous promoter of that excellent institution, which has reached such a forward state of usefulness, is far too well established to be affected by any decisions of the Governors on matters of general management; and his *ultimatum* gives the acts of the voters at the recent election an appearance of moral compulsion, which, we fear, only stifles, but will not disarm opposition. The retirement of Mr. Propert would have been an indescribable loss; and Mr. Cattlin and his supporters, while they still maintain, as they have a perfect right to do, their own opinions, will, we doubt not, hesitate before they take any steps which shall bear an aspect of ingratitude or disrespect towards the Founder of the Royal Medical Benevolent College.

Another tardy award of the Victoria Cross has just been made to a medical officer of the army. Here is the official notice recording his "act of bravery":—

"Surgeon James Mouat, C.B. (now Deputy-Inspector General of Hospitals, late of 6th Dragoons); date of act of bravery, 26th of October, 1854.—For having voluntarily proceeded to the assistance of Lieutenant-Colonel Morris, C.B., 17th Lancers, who was lying dangerously wounded in an exposed situation after the retreat of the Light Cavalry at the battle of Balaklava, and having dressed that officer's wounds in presence of and under a heavy fire of the enemy. Thus, by stopping a serious hæmorrhage, he assisted in saving that officer's life.

The army medical officers must not despair. Their acts of valour will, no doubt, come to light and be recognised, even though many years elapse.

A Bill to make further provision for the practice of Vaccination in Ireland has been brought into Parliament by Lord Naas and the Attorney-General for Ireland. It consists, besides the preamble, of two clauses only, as follows:—

"1. As soon as may be after the passing of this act, the committee of management of every dispensary district in Ireland shall, subject to the approbation of the Commissioners, divide such dispensary district into so many vaccination districts as they may deem advisable and necessary, and shall report such districts to the Commissioners for their approval, and shall require the medical officer of such district to attend at some convenient place within each such vaccination district, to be approved of by the said committee, at such times as the said committee may fix or approve; and the said medical officer shall, and he is hereby required to vaccinate all persons who may come to him for that purpose, subject to such regulations as may be issued by the Commissioners in that behalf.

"2. The board of guardians shall pay to each such medical officer, subject to such regulations as aforesaid, for every case of successful vaccination performed by him, the sum of sixpence; and in case the board of guardians shall neglect or refuse to pay the amount which may at any time be due to such medical officer, under such regulations as aforesaid, the same shall be recoverable by the said medical officer by such and the same actions and proceedings as money lent."

The Anniversary Meeting of the Irish Medical Association was held on Monday last at the Royal College of Surgeons of Ireland. We learn from the *Dublin Medical Press* that a great deal of important business was transacted, and many suggestions for future proceedings made and adopted. Dr. Mackesy was elected president, in place of Dr. Kingsley, who retires; and arrangements have been made to carry out the objects of the Association, during the ensuing year, vigorously and effectually.

LETTERS AND COMMUNICATIONS.

Letters or communications for the JOURNAL should be addressed to Dr. WYNTER, Coleherne Court, Old Brompton, S.W.

Letters regarding the business department of the JOURNAL, and corrected proofs, should be sent to 37, Great Queen Street, Lincoln's Inn Fields, W.C.

ADMISSION OF MEMBERS, AND PAYMENT OF SUBSCRIPTIONS.

THE General Secretary of the British Medical Association begs to call the attention of members to the Laws regarding the ADMISSION of MEMBERS, and the PAYMENT of their SUBSCRIPTIONS.

"*Admission of Members.* Any qualified medical practitioner, not disqualified by any bye-law, who shall be recommended as eligible by any *three* members, shall be admitted a member at any time by the Committee of Council, or by the Council of any Branch."

"*Subscriptions.* The subscription to the Association shall be One Guinea annually; and each member, on paying his subscription, shall be entitled to receive the publications of the Association for the current year. The subscription shall date from the 1st January in each year, and shall be considered as due unless notice of withdrawal be given in writing to the Secretary on or before the 25th of December previous."

Either of the following modes of payment may be adopted:—

1. Payment by Post-Office Order to the Treasurer (Sir C. Hastings, M.D., Worcester), or to the undersigned.

2. Payment to the Secretary of the Branch to which the member belongs.

3. Members residing in the Metropolis and vicinity can make their payments through the publisher of the BRITISH MEDICAL JOURNAL, Mr. Thomas John Honeyman, 37, Great Queen Street, Lincoln's Inn Fields, W. C.

PHILIP H. WILLIAMS M.D., *General Secretary.*

Worcester, May 1858.

Association Intelligence.

BRITISH MEDICAL ASSOCIATION: ANNUAL MEETING.

THE Twenty-sixth Annual Meeting of the BRITISH MEDICAL ASSOCIATION will be holden in Edinburgh, on Thursday, Friday, and Saturday, the 29th, 30th, and 31st of July.

The Address in Therapeutics will be delivered on Friday morning, by Professor Christison.

The Address in Surgery will be delivered on Friday afternoon, by Professor Miller.

The Address in Midwifery will be delivered on Saturday morning, by Professor Simpson.

Further particulars will be published shortly.

Members who propose to read papers at the meeting are requested to communicate their intention, as early as convenient, to the General Secretary,

PHILIP H. WILLIAMS, M.D.

Worcester, June 8th, 1858.

BRANCH MEETINGS TO BE HELD.

NAME OF BRANCH.	PLACE OF MEETING.	DATE
MIDLAND. [Annual Meeting.]	Board Room, Corn Exchange, Spalding.	Thurs., June 17th, 2 P.M.
BIRMINGHAM AND MIDLAND COUNTIES. [Annual Meeting.]	Star and Garter Hotel, Wolverhampton.	Friday, June 18th.
SOUTH EASTERN. [Annual Meeting.]	Royal Pavilion, Brighton.	Wed., June 23rd, 1 P.M.
EAST ANGLIAN. [Annual Meeting.]	Town Hall, Ipswich.	Friday, June 25, 2 P.M.
LANCASHIRE AND CHESHIRE. [Annual Meeting.]	Medical Institution, Liverpool.	Wednesday, June 30th.
NORTH WALES. [Annual Meeting.]	Uxbridge Arms Hotel, Carnarvon.	Tuesday, July 6th, 1 P.M.
METROP. COUNTIES. [Annual Meeting.]	11, Montagu Place, Bryanstone Square.	Tuesday, July 6th, 5 P.M.

[To prevent delay, Reports of Branch Meetings should be sent direct to the office, 37, Great Queen Street.]

Reports of Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 27TH, 1858.

W. FERGUSSON, Esq., F.R.S., in the Chair.

CASE OF LACERATION OF THE INTESTINE (ILEUM), UNACCOMPANIED WITH EVIDENCE OF EXTERNAL LOCAL INJURY, OR OF INTERNAL DISEASE. BY WILLIAM SWEETING, ESQ., M.R.C.S.

[*Communicated by* SIR C. LOCOCK, BART., M.D.]

A HEALTHY young man was thrown from the front of an empty waggon, on which he was riding, and fell on a heap of small stones by the road side. Getting up, he felt a little shaken, with some pain on the left hip and right shoulder, which parts were found to be bruised and discoloured on the following day. He walked some distance after the fall, and performed part of his duty in attendance upon his horses. He complained of general uneasiness through the next twenty-four hours, with costiveness, and a constant desire to have a motion without the power to relieve himself; but he had no symptoms of collapse, nor even nausea. He retained food and several doses of medicine, etc. He expired suddenly, after the administration of an enema, on the second day after the accident. On *post mortem* examination, a circular wound in the ileum, about an inch in diameter, was found. There was no bloody effusion in the peritoneal cavity. There had been no symptoms indicating peritonitis during life, but there was lymph effused on its surface, and the eversion of the edges of the wound proved the infliction of the injury during life. The intestines were quite empty.

Mr. FERGUSSON observed that one of the most remarkable features of the case was the absence of pain.

Dr. MARKHAM remarked that the intestines had been injured in other places besides at that point at which perforation had taken place. Inflammation appeared to exist over the entire of the intestines; the place at which the rupture took place was, doubtless, originally in the same condition. The rupture had, he believed, occurred during the time the patient was at stool.

Dr. JENNER had seen cases of perforation of the intestine without pain; whilst in other cases the pain was so severe that the patient cried out from it.

Mr. SPENCER WELLS did not think the fact that there was no external mark of injury very rare, though the author appeared to attach much importance to that circumstance. He (Mr. Wells) had seen several cases of severe internal injury, in which there were no external signs whatever. In two of these cases the bladder was ruptured from falls.

CONTRIBUTIONS TO THE ETIOLOGY OF CONTINUED FEVER; OR, AN INVESTIGATION OF VARIOUS CAUSES WHICH INFLUENCE THE PREVALENCE AND MORTALITY OF ITS DIFFERENT FORMS.

BY CHARLES MURCHISON, M.D., L.R.C.P.

The materials of this paper consisted principally of an analysis of 6628 cases of continued fever which had been admitted into the London Fever Hospital in the ten years during which the distinctions had been recorded between typhus, typhoid, relapsing fever, and febricula. The results thus arrived at were compared with the statistical data which the author had obtained from many of the principal hospitals in England, Scotland, and Ireland, and from various published records. The subject was discussed under the following heads:—

A. *Prevalence of Continued Fever.* 1. The various epidemics of continued fever which have prevailed in Great Britain and Ireland during the present century. 2. Which are the forms of continued fever of which these great epidemics have been composed? 3. The influence of months and seasons of the year on the prevalence of the different forms of continued fever. 4. The influence of sex. 5. The influence of age, as shown by a calculation of the mean age of each of the different forms of fever, and by ascertaining the number of cases in each quinquennial period of life. 6. The influence of occupation and station in life on the prevalence of the different forms of fever. 7. The localities of London in which each form of fever is most prevalent, as shown by the localities from which the 6628 cases admitted into the London Fever Hospital had been derived. 8. Over-crowding, with deficient ventilation, and destitution, as causes of fever. 9. Putrid emanations from decomposing organic matter in drains, cesspools, churchyards, etc., and organic impurities in drinking-water. 10. The contagiousness of the different forms of fever. 11. The influence of recency of residence in large towns as a predisposing cause of fever.

B. *Mortality from Continued Fever.* 1. The rate of mortality from fever in the London Fever Hospital, as compared with that of eleven other hospitals. 2. The rate of mortality in the different forms of fever. 3. The influence of months and seasons of the year on the mortality of the different forms of fever. 4. The influence of sex. 5. The influence of age. 6. The influence of station in life. 7. The influence of recency of residence in large towns.

The paper terminated with the following conclusions:—

1. Typhus and relapsing fever occur at irregular intervals, and often simultaneously, as widely-spread epidemics. They then gradually disappear; and both of them, but especially the latter, may be absent for years from those places where, during the epidemics, they are usually the most prevalent.

2. Typhoid fever does not occur in such widely-spread epidemics. In certain places it is never absent; and its prevalence varies but little from year to year. When outbreaks of it occur in other situations, these are always of the most local and circumscribed character.

3. Typhus and relapsing fever are quite independent of the season of the year; whereas typhoid fever is almost invariably most prevalent during the autumn, and it has been observed to be especially prevalent in seasons remarkable for their high temperature.

4. Sex has no influence over the prevalence of continued fever, nor over that of any of its forms.

5. Typhoid fever is pre-eminently a disease of childhood and adolescence, at which periods of life we know that there is

a marked proneness to enteric affections. Less than one-seventh of the cases of typhoid fever are above thirty years of age. Typhus and relapsing fever exhibit no such predilection for youth. Of typhus, one-half, and of relapsing fever, one-third, of the cases are above thirty.

6. Typhus and relapsing fever are the appanage of poverty and destitution, and seldom or never occur amongst the wealthy, except from direct contagion. Typhoid fever attacks both poor and rich without distinction.

7. In large cities, typhus and relapsing fever are for the most part limited to those localities remarkable for the over-crowding of their inhabitants; and in country districts they are seldom or never met with, except when directly imported. Typhoid, on the other hand, occurs alike in the centre and suburbs of cities, in the crowded hovels of the poor, and in the spacious mansions of the rich, and also in isolated houses and hamlets in the country, without any traceable sources of contagion.

8. When fever breaks out in a house or locality, it seldom or never happens that some of the cases are typhus and others typhoid; but typhus and relapsing fever occur not unfrequently together.

9. Cases of what has been called "febricula" may co-exist along with any of the three other forms, but especially with typhus and relapsing fever. Most of them are either mild varieties of some of these, or dependent upon some derangement of digestion, or other non-specific causes.

10. Over-crowding and destitution appear to be the essential causes of typhus and relapsing fever, and to be capable of generating them *de novo;* while there is no evidence that they have any such influence over the production of typhoid fever.

11. There are many circumstances which tend to the belief that the emanations from decaying organic matter, or organic impurities in drinking-water, or both of these causes combined, are capable of generating typhoid fever; but there is no authenticated evidence whatever to prove that such causes can give rise to typhus or relapsing fever.

12. There are some grounds for believing that a combination of the causes mentioned in the two last paragraphs may occasionally, although very rarely, generate a disease intermediate in its character between typhus and typhoid, or may (to speak perhaps more correctly) cause typhoid fever to assume some of the characters of typhus; but such cases cannot be used as an argument in favour of the identity of the poisons of the two diseases; for, first, instances are not wanting of two of the exanthemata co-existing in the same individual; and, secondly, if a known poison generates one train of symptoms, and a second poison another, a combination of the two poisons will generate a combination of the two trains of symptoms, without its being warrantable to conclude that the poisons in the two first instances were identical.

13. Typhus is eminently contagious. Typhoid fever is also contagious, but in a more limited degree, and possibly through a different medium. Again, typhus has in no instance been proved to communicate typhoid, nor typhoid to communicate typhus. An attack of either confers an immunity from future attacks of itself, but not of the other.

14. Recency of residence increases the liability to typhoid; scarcely, if at all, that to typhus.

15. The great majority of the cases of relapsing fever have been Irish, and of these a large proportion had but recently arrived in London. There seems reason for believing that fever imported from Ireland as "relapsing" may gradually pass into typhus.

16. Relapsing fever offers a marked contrast to typhus and typhoid in the small mortality which it occasions.

17. In comparing the mortality from continued fever at different times and places, it is essential to take into consideration the form of fever which has prevailed. If this be not done, the comparison is valueless.

18. The small mortality from continued fever constantly observed in Ireland, along with other circumstances, renders it probable that in that country a fever more or less allied to the relapsing, or to febricula, is more common than in Britain.

19. Season of the year has no influence over the mortality of any of the forms of fever.

20. In all of the fevers there is not much difference in the mortality of the two sexes.

21. Typhus is least fatal between the ages of ten and twenty, the mortality at that period of life being under 5 per cent. Above twenty, the mortality increases with the age, until of those above fifty considerably more than one-half die. The mortality from relapsing fever appears to be influenced by age in a similar manner. In typhoid fever, on the other hand, in no period of life is the mortality under 12½ per cent.; and although, as in typhus, the rate of mortality increases with the age, it does so in a less degree.

22. The mortality from typhus is greater amongst the very poor than amongst those in better circumstances. Typhoid fever is equally mortal in all classes.

23. Recency of residence increases the mortality from, as well as the liability to, typhoid fever, but has no such influence over typhus.

24. Typhus and relapsing fever are strongly assimilated in the causes which give rise to them, if the specific poison of the two be not actually the same. Typhoid fever, on the contrary, appears to be a perfectly distinct affection, dependent upon totally different causes.

25. The facts which have been adduced in reference to the mode of origin of the different forms of fever deserve the serious attention of those entrusted with the care of the public health, for it is manifest, that should they be confirmed by subsequent observation, they must have an important bearing on the subject of hygiene.

Dr. Wardell had taken, some years since, elaborate statistics of 1200 cases of fever in Edinburgh. The conclusions at which he had arrived were in many respects similar to those stated in the paper before them. The disease occurred almost invariably amongst the poor in the densely crowded districts of the old town on the highest flats. His conclusions respecting the generation of fever did not quite coincide with those of the author, who seemed to think that the disease was generated chiefly by noxious vapours. In the Canongate and Cowgate, however, the persons who lived in the lower flats, and consequently nearest the sinks and cesspools, were better off than those above, who were more destitute.

Dr. Stallard's own experience at Leicester bore out some of the author's conclusions. He agreed with him that typhoid fever prevailed more in autumn than other seasons. In an hospital with which he had been connected the cases of typhoid fever averaged twenty to thirty in the autumn, and rarely five or six in the spring. A large number of cases occurred amongst the better classes in the epidemic of 1846. His opinion respecting the cause of fever was similar to that of the author. In the year immediately preceding the epidemic of 1846, there was great destitution in Leicester, 10,000 persons being sometimes on the pauper list, yet there was no considerable amount of typhoid prevailing. In 1846, there was less destitution. A large portion of the town was only surface drained, and many of the poor lived in houses back to back, in the form of squares, with cesspools in the centre. Typhoid fever at one time prevailed for a considerable time in a street in the high part of the town, and it was eventually accounted for by the discovery of a choked-up sewer insufficient for drainage purposes. In a manufacturing village in Leicestershire, containing from 2000 to 3000 inhabitants, a gentleman last year spread the contents of a cesspool over a field in the centre of the village. It resulted in the fact of one hundred and fifty persons being ill at the same time, and the occurrence of a very large number of deaths. He had observed that with the increase of the velocity of the wind the number of cases of fever decreased—a fact which had an important bearing on the subject of ventilation.

Dr. Jenner lamented the circumstance of so many persons dying yearly from what were preventible diseases. Typhoid fever, he had no doubt, arose from imperfect sanitary conditions. When it occurred amongst the rich, it was in those who were exposed to fæcal and other noxious emanations, or who drank water into which fæcal matter had passed. With the exception of medical practitioners, he had only seen two or three cases of typhus fever amongst the better classes.

Dr. Gairdner coincided in opinion with the author respecting the essential difference between typhus and typhoid fever. The former prevailed to a great extent in Edinburgh; but two years since, as much as six weeks or two months would elapse without a single case being received into the Infirmary. Typhoid fever, however, still maintained its level, even if it had not increased, whilst typhus was thus disappearing. He differed from the author as to the identity of typhus or relapsing fever. Experience in Edinburgh in 1843, tended to prove that the poisons were essentially different, and were generated under different circumstances. During the last ten years, the type of typhus fever seemed to have changed. In the first place, it was a much milder disease; and whilst the mortality attending

it ten years ago was scarcely less than one in four, during the last three or four months, he (Dr. Gairdner) had had fourteen cases of true eruptive typhus, not one of which had proved fatal; and the average mortality probably did not exceed one in thirty. The duration of fever was also diminished. Ten years since, it never stopped before the fourteenth day, but it was now common to see it terminate by the tenth day, and sometimes as early as the eighth or ninth. All the symptoms were earlier in their development, particularly the eruption, which did not appear formerly before the beginning of the second week, but now it showed itself by the sixth, or even the fifth day; indeed, he had seen it as early as the third or fourth. He had observed that in eruptive cases there was no relapse, even though there might be an early crisis.

Dr. WARDELL had seen patients with true spotted typhus subsequently attacked with relapsing fever, but he regarded the diseases as distinct as measles and small-pox.

Dr. JENNER, from observation made ten years ago, had long thought that the eruption of typhus fever might be expected on the fifth day. He had not himself, during the last ten years, observed any change in the type of the disease.

Dr. STEWART had, many years since, seen cases of typhus in Edinburgh answering the description of the present form of the disease as given by Dr. Gairdner.

NORTH LONDON MEDICAL SOCIETY.

WEDNESDAY, MAY 12TH, 1858.

JOHN E. ERICHSEN, Esq., President, in the Chair.

PECULIARITIES OF THE INTERIOR OF THE ANTRUM: FANG OF A TOOTH IMPACTED IN A POCKET IN THE ANTRUM.

BY W. A. N. CATTLIN, ESQ.

MR. CATTLIN described and demonstrated from a variety of preparations, wax models, and drawings, some interesting peculiarities of the antrum, and called the attention of the society to their importance in a surgical point of view. He stated that the *interior* of the antrum had not yet been described with sufficient minuteness for practical purposes; that Highmore entertained an erroneous idea of its shape; and that although Holden, in his beautifully illustrated work, had given the best description he had met with, still even that author had failed to point out many important varieties.

The most common shape of the antrum of Highmore was certainly somewhat pyramidal; but it would be difficult to collect many specimens precisely alike. As a general rule, it was larger in the male than in the female; but, from a limited investigation, he believed the cavity sometimes diminished in old age. Its shape and size were extremely variable; and it very often differed in these respects, as well as in the elevation of the floor on the two sides of the same subject. Pockets and fossæ formed by thin plates, and thick ridges of bone were frequently met with in all parts of the antrum, but particularly in the anterior and posterior parts of the floor; and their depth was often increased by depressions in the walls. The canine, bicuspid, and molar teeth, would be found to perforate the inferior wall more frequently than was generally supposed. The important bearing which these facts had upon operations on the upper jaw-bone, and the errors of diagnosis which they were calculated to cause, were supported by the following remarks:—If the trephine or trocar should impinge upon such a plate or ridge of bone as would be found in some of the preparations upon the table (which were most frequently seen between the first and second molars), the surgeon might readily be led to think that the instrument had not reached the antrum, or that a bony tumour was present in its interior. If under such an impression the parts should be carefully examined, a probe would strike against the bony septum; and if the operator were not aware of the peculiarities which had been described, a serious error in the diagnosis of the case would most probably be made. An unique specimen of osseous cyst within the sinus containing a loose tooth was exhibited, to show that the most skilful surgeon might mistake one of the plates of bone for a similar growth. The society was indebted to the liberality of Mr. S. Cartwright for the opportunity of examining the preparation. The deep pockets and fossæ which had been demonstrated showed the necessity for washing out the fœtid and acrid discharges (which, in cases of disease, would collect in those parts) prior to the use of injections, and also the importance of using a tube perforated in many parts, so as to throw the fluid forcibly in all directions. The difficulty of extracting foreign bodies from the antrum when impacted in a deep pocket or fossa, was illustrated by the following case, which occurred only a short time since, and had been published in the *British Journal of Dental Science*. The fang of a tooth had, during an attempt to extract it, passed completely into the antrum. The patient being a gentleman, whose father had died of secondary malignant disease of the jaw, a consultation was held with an eminent hospital surgeon; and it was thought advisable under the circumstances to trephine the antrum; but although two large openings were made, and the cavity was frequently explored and injected, at the expiration of an hour's search, three surgeons had failed to remove the fang. On the second day, a large quantity of water was forcibly injected from a powerful enema-syringe, but with no better success; and on the third day, Mr. Cattlin constructed a small gutta percha scoop, which was attached to the end of a gold probe bent at such angles as to sweep the floor of any pocket in which the foreign body might have lodged. With the aid of this simple instrument (which was exhibited) the fang was readily removed in the course of a few seconds. It was somewhat surprising that so little pain followed from the operation, and so much irritation of the lining membrane. After two or three days the patient pursued his ordinary business, and at the end of three months the parts looked perfectly healthy, and had apparently filled up with bone. A small quantity of *healthy mucus* could, however, be forced through a very minute opening in the gum, about four months after the operation; very little inconvenience of any kind was suffered after the first two days.

Mr. Cattlin apologised for the small amount of original information which he had been able to bring before the fellows, and thought it right to state that most of the facts related were embodied in a paper which had been read before the Odontological Society of London.

The PRESIDENT inquired whether Mr. Cattlin had met with many cases where the walls of the antrum were so thin as to crackle when pressed in the manner which had been described by some authors?

Mr. CATTLIN replied that he had seen both the antrum and superior walls much dilated, but not sufficiently so to cause the sensation alluded to. He thought the feeling mentioned was often attributed to disease of the antrum, when, in fact, it really arose from a membranous cyst, which generally commenced in the alveolar, and dilated the bone in the neighbourhood of the antrum. Such a condition of parts was not very uncommon.

Mr. PART suggested whether the difference in the two sides of the face which was so often seen might arise from the difference in the size and elevation of the antrum which had just been demonstrated.

Mr. CATTLIN thought that variations in the malar bone contributed somewhat to the appearances alluded to, but had no doubt that the size and shape of the antrum materially affected them. He recommended that the sides should always be carefully compared within the mouth prior to perforating the anterior walls of the antrum.

HARVEIAN SOCIETY OF LONDON.

MAY 6TH, 1858.

G. HAMILTON ROE, M.D., President, in the Chair.

CASE IN WHICH THE OPERATION OF PARACENTESIS THORACIS WAS PERFORMED FOR THE RELIEF OF OBSTINATE VOMITING.

BY T. HESLOP, M.D.

THE particulars of the case, communicated to the Society by Dr. HESLOP of Birmingham, were as follows:—

The patient was a girl aged 20, who had been for two months affected with effusion into the left pleural cavity. Extreme emaciation, night sweats, etc., were present; and, in addition to these, no food of any kind was retained by the stomach. No relief following ordinary measures, and it being evident that the patient was dying of inanition, Dr. Heslop advised the performance of the operation. Two pints of fluid were drawn off, and the relief which followed was immediate and complete. The patient rapidly recovered. Dr. Heslop added that, in advising the performance of the operation, he took the same line of argument as that pursued by the accoucheur in inducing artificially premature labour, when the interference with important functions, as that of the stomach, calls for that proceeding.

The PRESIDENT related the particulars of a case of circumscribed pyæmia, occupying the left mammary region in a child aged 9. The diagnosis having been fully established, a cannula and trocar were introduced, and ten ounces of a purulent fluid evacuated.

SCROFULOUS DISEASE OF THE TESTICLE.
BY WEEDEN COOKE, ESQ.

The principal object of the paper was to show the advantage of constitutional treatment, by means of which castration might be avoided. He described the causes and nature of this disease; for the purposes of diagnosis, contrasted it with the other lesions of this gland—viz., scirrhus, cephaloma, cystic disease, syphilitic sarcoma, and common hypertrophy; and related several cases in which there had been tubercular enlargement with abscess, and in some a protruding fungoid growth. In all these cases, he had found a combination of iron in full doses with iodide of potassium to improve the vital powers; that, with the aid of a sulphate of copper lotion, or the salt itself applied to the ulcers, a perfect cure was obtained; whereas, it frequently happened that, after the removal of a tuberculous testis by the knife, the disease would reappear in the remaining one.

In the discussion which followed, Dr. Camps, Dr. Handfield Jones, Mr. Ballard, Mr. Stewart, and Dr. Coote, joined.

Editor's Letter Box.

MEDICAL REFORM: THE UNIVERSITIES AND THE COLLEGES.

SIR,—I am entirely at a loss to understand the tone of the leading articles in the JOURNAL in regard to medical reform. Last Saturday we are told, "No one grudges the corporations their fair share of power; but the time has passed when the possessors of their diplomas are to ride roughshod over the graduates of the Universities. Equal justice must be done to all." Now, what does this mean? As nearly all graduates are likewise and previously (as it is right they should be) diploma-holders, and as University classes qualify for College diplomas, it is not easy to perceive where the roughshod riding is. It is rather the licentiates who have reason to complain that they are shut out from our University degrees because they happen not to have attended the lectures of University professors. It is amusing to see the clever use made of the nickname "corporation", applied to the Colleges by the Universities and their partisans, forgetful of the old advice to those who live in glass houses. Our English friends do not seem to be aware that it is exactly the reverse—that our Universities are the close "corporations", while our College of Surgeons is the true "University". The College fellowship is open to all members of the profession, including professors; it does not compel attendance on the lectures of its Fellows, but does equal justice to all medical schools; and the examiners do not hold their position *ex officio* or permanently, but are elected, and dismissable, by the Fellows. Now, here is the license coming through the profession; and, as regards education, the true "University" constitution. But our Scotch Universities are "corporations" of the closest kind. The Edinburgh, Aberdeen, or Glasgow degree, is given only to those who have attended the professors' lectures; and, as if to make the monopoly tighter still, the professors are the sole examiners, neither appointed by, nor responsible to, their professional brethren. The graduates have no say in, nor has the profession anything to do with, the management of these Universities. To give the licensing power to these already over-privileged institutions would merely be to enrich a handful of professors in each city, at the expense of other medical schools and the Colleges of Surgeons; and to place the licensing power irrecoverably in the hands of a few irresponsible professors. Is the profession prepared to allow this? Ought we not rather to insist that our Scotch Universities shall be opened up; that they shall become Universities indeed; do justice to all medical schools; and have their examiners elected by and responsible to the profession? And, were it so, I see no reason why the University degree should not carry the license. Let our Scotch Universities be placed on a footing similar to that of the London and Irish Universities, recognising all schools, and the examiners neither *ex officio* nor permanent; and then they might ask, with some show of reason, that their degree should carry the license. One thing only would be still necessary to bring about the "equal justice to all"—viz., that, if the Scotch University degree is to include the license, the College of Surgeons' diploma should include the degree. The Scotch University requirements being no higher than those for the College diploma, the justice of this reciprocity is patent.

The question of medical reform being now narrowed to this matter of licensing—in itself a great question for the profession—it seems to me that the JOURNAL of the Association has got somehow on the wrong side in pleading the cause of the so-called "Universities", as against the great and unassailable principle, that licensing ought to remain in the hands of the profession. It is greatly to the credit of the Association, that, notwithstanding repeated JOURNAL entreaties (authorised only by the opinion of the majority of the Medical Reform Committee), only a few lukewarm speeches, and a scanty crop of petitions, have resulted in favour of Mr. Cowper's Bill. The partisans of this Bill have therefore no right to say that it has the support of the Association, if the great majority of the members be admitted to constitute the Association. It must be partly this partisanship of the JOURNAL which is alluded to in the motion at the Yorkshire meeting, "That the JOURNAL does not represent the intelligence and importance of the Association." And it is very natural for the members to ask why their JOURNAL should be made the vehicle for cramming down their throats an unwelcome Bill; and why the cunning and hypocritical cry of "corporation" should be used against the Colleges of the profession, for the special benefit of the closest of all corporations—that small but active body of professors who call themselves "the Universities".

I am aware that these views and remarks cannot be agreeable to you, but feel it my duty to lay them before the Association, believing that the profession would afterwards bitterly regret the passing of Mr. Cowper's or any other Bill which does not retain the licensing power in the hands of the profession.

I inclose my card, and am, etc., M.D.

Edinburgh, June 7th, 1858.

["M.D." says he does not understand our meaning: we will endeavour to explain it in few words. What we have advocated is the principle laid down in Mr. Cowper's Bill; viz., that every University and medical corporation now existing should have equal rights as *examining* bodies; and that the *license* to practise should belong to none of these bodies, but be entirely placed in the hands of the Medical Council—in fact, in the hands of *the profession*. This is a very different thing from extending the licensing privilege—which "M.D." supposes Mr. Cowper's Bill to do. As to the alleged closeness of the Scotch Universities, that is a subject a little foreign to the matter in hand; but we quite agree with "M.D." in admiring the liberality of the London and Irish Universities. "M.D." is not very well pleased with us for supporting the opinion of "the *majority* of the Medical Reform Committee". Does he mean that we should uphold the views of the *minority*? Our correspondent is premature in his remarks about the Branches. Out of seven or eight which have given an opinion, one only has expressed decided dissatisfaction with Mr. Cowper's Bill, while, by the members of six Branches, petitions in its favour have been adopted; and the majority of them have not yet held their meetings. As to our being displeased when fault is found with us, we can only say that we do not expect every one to agree with everything we say; but, so long as we do what we believe to be in accordance with the wishes of the Association in general, we can bear with complacency the reproof of any gentleman who may think he has cause to differ from us. EDITOR.]

ROYAL MEDICAL BENEVOLENT COLLEGE.

LETTER FROM W. A. N. CATTLIN, ESQ.

SIR,—Freedom of election is a matter of the highest importance; yet it has been again tampered with at the adjourned meeting of the governors of the Royal Medical Benevolent College, held yesterday at Freemasons' Hall. In precisely the same manner discussion was stifled as at the former meeting, the governors rushing to vote whilst a speaker was addressing the meeting, and the ballot was allowed to take place before even the names proposed for election had been put from the chair.

There was, however, this difference, viz., that the chairman was perfectly impartial, but was unable to prevent the confusion. Mr. Hancock flatly contradicted the correctness of the figures of Messrs. Harding and Pullen, which figures were drawn up by those eminent accountants from statements of account published by the Council themselves, and made other assertions which admitted of complete refutation had Mr. Warwick (who rose for the purpose of correcting such errors) been allowed the opportunity of reply. Let me therefore beg of the governors to suspend their judgment until an answer, which will shortly be published, has been made to Mr. Hancock's talented speech.

Mr. Propert has also addressed the following circular to the governors; and I leave it for your readers to consider whether or not it was likely to influence the election of councillors, which is the only power the governors possess in the management of the institution, except the privilege of refusing to confirm any alteration of the laws *proposed by the council.*

I am, etc., W. A. N. CATTLIN.

Islington, June 9th, 1858.

(COPY.) "New Cavendish St., 1st June, 1858.

"DEAR SIR,—Permit me to remind you that the adjourned meeting of the governors of the College will take place on Tuesday, the 8th inst., at the Freemasons' Tavern, at two o'clock, when I trust that every well-wisher of the Institution will make a point of attending to mark his sense of the present factious and, to myself personally, most ungrateful opposition, which must end in the destruction of a noble and much needed undertaking. If, however, we do not meet with that support I conscientiously consider we are justly entitled to receive, I must here state, though most reluctantly, that I shall resign all future connection with an Institution I have indeed laboured hard to establish for the benefit and comfort of my less fortunate labourers in the vineyard. I have, however, this consolation in doing so now, that I have completed my task, and that I shall leave it with increasing funds and increasing demands for admission into the school.

"I remain, dear Sir, very faithfully yours,

"JOHN PROPERT."

THE MEDICAL DIRECTORIES.

SIR,—The case of Mr. Fergusson and his friend Dr. Bell has called attention to the subject of quackery in a way which must end in beneficial results. One point suggested to me by it is the fact that, in the *Medical Directory* published by Churchill, practitioners of all sorts are placed together side by side. Is it not scandalous that such names as those of Bright and Watson and Holland should be placed on the same list as those of renegades who, finding their pockets not filling fast enough, have adopted homœopathy, hydropathy, Mesmerism, and every other humbug? Mr. Churchill should be made to know that he insults the profession by such a proceeding, and should be urged to give these gentlemen in a separate list. If he will not, let no man who regards his reputation permit him to publish his name; or, at all events, let him refuse to fill up his annual circular. I call the attention of your readers earnestly to this matter; and am, etc.,

"JUSTUS ET TENAX PROPOSITI."

June 7th, 1858.

Parliamentary Intelligence.

HOUSE OF LORDS.—Friday, June 4th, 1858.

SALE OF POISONS BILL.

The Earl of DERBY, in moving the second reading of this Bill, said, its purport and aim were to carry into effect that which had been an object with that and the other House of Parliament for a considerable time, and in reference to which their lordships, last year, appointed a select committee, which went very carefully into a consideration of the whole question. The Bill was founded almost entirely on the recommendations of that committee. He had referred the measure to the Pharmaceutical Society, and also to the College of Physicians, for any observations they might wish to make upon it, and where those two learned bodies had agreed, he had adopted the amendments they had proposed; where they differed, he had adhered to the original draught of the Bill. The first object of the Bill was to increase the difficulty of obtaining poisons for criminal purposes; and the other objects of it were to prevent, as far as possible, the occurrence of those lamentable accidents which arose partly from ignorance, and partly from carelessness, on the part of those persons who exercised the business of selling drugs and poisons. It provided, among other things, that poisons should not be sold except to persons of full age, who should be known to the person selling them, and whose name should be signed in a book. If the purchaser were not known to the person selling the poison, it was provided that he should produce a certificate signed by a householder, with his name and residence, stating that he knew the person to whom the sale was to be made, and those circumstances were to be entered in a book by the party selling the poison. Those very stringent provisions were applied to a considerable number of poisonous substances enumerated in a schedule attached to the Bill. There were, no doubt, other substances equally poisonous, but, at the same time, the sale of which could not be subjected to all the stringent provisions contained in that first clause, without, in point of fact, altogether destroying certain branches of trade and preventing the transaction of legitimate business. These were laudanum, opium, tartar emetic, and chloroform; but it was obvious that there should be some restriction even with regard to the sale of those substances, with the view to the prevention of accidents arising from ignorance, incompetence, and carelessness. It would be recollected that there was conclusive evidence given before the committee of last year, that the sale of poisons was carried on by persons who had not the slightest knowledge of the properties of those poisons, and who were utterly unfit, by their education and knowledge, to deal with such dangerous materials. [*Hear, hear.*] It was proposed that, preserving to all persons at present engaged in the sale of poisons the right to continue their business, for the future no person should be permitted to sell poisons of either of the classes he had mentioned without possessing a license, which license would only be granted after an examination of the party by properly qualified examiners. It was intended that those examiners should be three in number; one to be appointed by the Pharmaceutical Society, another by the College of Physicians, and the third by the Society of Apothecaries. All those persons, who for the space of one year prior to the passing of the Act should have been engaged in the sale of poisons, to be licensed to carry on their business for a period of five years, but the license not to be continued or renewed at the expiration of that time, unless the party submitted himself to an examination. The other question to be considered was that of carelessness on the part of the sellers; and, with a view to meet that it was proposed, that all persons selling poisons should be required to keep them distinct and separate from all other drugs, and that the examiners, or persons appointed by them, should be at liberty, at all reasonable times, to visit all shops where poisons were sold, in order to ascertain whether the requirements of the Bill were complied with. There were pecuniary penalties for infringement of any of these provisions, and it had been considered, also, lately necessary, that when the poison had been improperly sold, or otherwise dealt with by any servant or shopman, the employer should be held liable and subject to the penalties attaching to the offence. With regard to arsenic, there was a special provision that it should be kept mixed either with soot or indigo, except in cases where it could be shown that it was required for purposes for which such mixture would render it useless. Those were the main provisions of the Bill; and although some persons were inclined to urge more stringent regulations, yet it had been deemed most prudent to act in accordance with the views of the medical profession, and thus insure that willing co-operation that was needed to carry the measure into beneficial operation. There were some verbal amendments which would be introduced, and he now proposed to read the Bill a second time, and to go into committee *pro formâ* on Monday next.

Earl GRANVILLE thought the Government had acted wisely in adopting the suggestions of the Pharmaceutical Society and the College of Physicians. With regard to the examiners, he was not sure that the Government ought not to appoint them, or at least one of them. The Bill, with a few amendments, would, he thought, prove a beneficial measure, and he therefore supported the second reading.

Lord CAMPBELL expressed his satisfaction that there was at last a prospect of the important subject of the sale of poisons being effectually dealt with.

After a few observations from the Earl of HARDWICKE and Lord AVELAND, the Bill was read a second time.

HOUSE OF COMMONS.—Monday, June 7th, 1858.

PURIFICATION OF THE THAMES.

Mr. GRIFFITH wished to ask the Chief Commissioner of Works whether he was not aware that, in any consideration of the state of the water of the Thames, the whole question at issue was that of the effect upon the purity of the air which might be produced by the liberation of gases injurious to health from the water.

Lord J. MANNERS said that he thought the question of the honourable gentlemen was put rather with a view of stating

a theory than of obtaining information; but, however that might be, he begged to assure him that he did not feel himself competent to answer the question. [*A laugh.*] He would suggest to his honourable friend that he should write a letter to the Chairman of the Committee which was inquiring into the subject, requesting to be called as a witness, and then he would have an opportunity of substantiating the theory which he wished to set forth.

PETITIONS.

Petitions in favour of Mr. Cowper's Bill have been presented from medical practitioners residing in Stow-on-the-Wold, Moreton-in-the-Marsh, Bourton-on-the-Water, Guildford, and Great Grimsby.

Petitions in favour of Mr. Duncombe's Bill has been presented from Brighton, and from Mr. John Gibbs (with amendments).

Petitions from followers of Dr. Coffin's system, praying for equal rights with medical practitioners, have been presented from inhabitants of Pudsey, Wednesbury, Laverstoke, Brighton, Durham, and Wolverhampton.

A petition has been presented from Charles Chadwick, Leeds, praying that in any legislation which may take place with regard to the medical profession, no person having already paid a stamp duty upon his admission to practise shall be called upon to pay any further stamp duty for liberty to practise in the United Kingdom.

Petitions in favour of improved remuneration to Poor-Law Medical Officers have been presented from the South-Midland Branch, and from medical officers of the Northleach union.

A petition has been presented from the medical practitioners of Hamilton (Scotland), complaining of the duties and penalties imposed on them without remuneration, by the Act for the Registration of Deaths, etc.

Medical News.

BIRTHS, MARRIAGES, DEATHS, AND APPOINTMENTS.

In these lists, an asterisk is prefixed to the names of Members of the Association.

BIRTHS.

LEACH. On June 3rd, at Sandgate, the wife of Henry Leach, Esq., Surgeon, of a son.

MCCLURE. On June 5th, at 2, Clifton Terrace, Maida Vale, the wife of William George McClure, M.D., of a son.

PLUMBE. On June 2nd, at Maidenhead, the wife of Samuel Plumbe, M.D., of a son.

MARRIAGES.

BIRD—PARSONS. *BIRD, George Gwynne, M.D., of Swansea, to Jane, youngest daughter of the late Samuel Parsons, Esq., of Court Herbert, near Neath, Glamorganshire, at Oystermouth, on June 3rd.

BLENKINS—SWINEY. BLENKINS, George E., Esq., Surgeon-Major Grenadier Guards, to Louisa Harriet, third daughter of Lieut.-General George Swiney, Bengal Artillery, at St. Mary's Church, Cheltenham, on June 1st.

LONGTON—WRIGLEY. LONGTON, Edward J., M.D., of Southport, to Eleanor, youngest daughter of James Hardy Wrigley, Esq., of Sandowne, Southport, at St. James's, North Meols, on June 1st.

NELHAM—BRADSTOCK. NELHAM, Ambrose, Esq., Surgeon, of Poplar, to Elizabeth, eldest daughter of John Bradstock, Esq., of Low Leyton, Essex, on June 1st.

PATTENSON—CRYER. PATTENSON, John Edward, Esq., late of Melmerby Hall, Cumberland, to Emma, widow of Willson Cryer, M.D., of Clifton, at Walcot Church, Bath, on June 3rd.

STEVENSON—WILLAN. STEVENSON, Walter J. H., Esq., Bombay Artillery, to Charlotte Anna, eldest daughter of Leonard R. Willan, M.D., at St. Mary's, Penzance, on June 5th.

THOMSON—BEAUMONT. THOMSON, Henry Byerley, Esq., second surviving son of the late Anthony Todd Thomson, M.D., to Sarita, eldest daughter of the Count de Beaumont, at Hove Parish Church, Brighton, on June 3rd.

DEATHS.

GRAVELY. On June 4th, at Newick, Sussex, aged 7, William, eldest son of *Richard Gravely, Esq., Surgeon.

HUMPAGE, Edward, Esq., Surgeon, at Hackney, on June 4th, aged 26.

MARTER, William, Esq., Surgeon, at Rochester, North America, on May 20th.

WARDEN. On June 1st, Gertrude Mary, the infant daughter of *Charles Warden, M.D., of 9, Cherry Street, Birmingham.

APPOINTMENTS.

EADE, Peter, M.D., elected Physician to the Norfolk and Norwich Hospital.

*POPE, Joseph J., Esq., late Senior House Surgeon to the Liverpool Southern Hospital, elected a District Medical Officer of the Borough of Liverpool.

PASS LISTS.

ROYAL COLLEGE OF SURGEONS. MEMBERS admitted at the meeting of the Court of Examiners, on Friday, June 4th, 1858:—

ASHBY, Joseph Francis, Clement's Inn
BABBAGE, William Berry, New Kent Road
CROMPTON, Frederic, Bury, Lancashire
CROWFOOT, William Miller, Beccles, Suffolk
FRY, Walter, Forest Hill
NASH, Charles Samuel, Box, Wiltshire
RINGROSE, Ernest, Potter's Bar, Middlesex
WILKES, Edwin, Salisbury
WILLIAMS, William, Menai Bridge, Anglesea

NEW FELLOWS. The following members, having undergone the necessary examinations, were admitted Fellows of the College at a meeting of the Council, on June 10th:—

BALDING, Daniel Barley, Middlesex Hospital: diploma of membership dated January 28th, 1853
BARRETT, Caleb, Gloucester: April 7th, 1843
GASCOYEN, George Green, Oxford Terrace: July 30, 1855
HARPER, Philip Harry, Cambridge Street, Hyde Park: May 13th, 1845
JONES, William Price, University College: July 28th, 1852
MOON, Robert Henry, Ilfracombe: March 31st, 1854
SMITH, Thomas, St. Bartholomew's Hospital: July 7, 1854
TEEVAN, William Frederick, Dorset Place, Regent's Park: (not a member.)

The following members of the College, who had been elected at previous meetings of the Council, were also admitted Fellows on the above occasion:—

BIRD, Henry, Newnham: diploma of membership dated January 10th, 1834
COOPER, Thomas Henry, Slough: February 24th, 1843
CRIDLAND, Arthur John, Putney: December 22nd, 1840
EVERETT, David, Worcester
HAYMAN, Henry, Ottery St. Mary, Devon: May 5th, 1834
HUGHES, John, Carmarthen: June 29th, 1840
JOBSON, John, Bishop's Auckland: May 24th, 1841
MARTIN, William, H.E.I.C.S., Bengal: May 20th, 1836
RANSOM, Robert, Cambridge: March 18th, 1842
TAYLOR, Robert, George Street, Hanover Square: February 4th, 1842

APOTHECARIES' HALL. Members admitted on Thursday, June 3rd, 1858:—

BARKWAY, Robert Edgar Edward, Bungay, Suffolk
LAW, John, Barnstaple, Devon

HEALTH OF LONDON:—WEEK ENDING JUNE 5TH, 1858.

[From the Registrar-General's Report.]

THE deaths registered in London, which rose in the previous week to 1106, declined in the week ending last Saturday, June 5th, to 1087, of which 533 are deaths of males, 554 those of females. In the ten years 1848-57 the average number of deaths in the weeks corresponding with last week was 964; but as the deaths returned for last week occurred in an increased population, they can only be compared with the average, when the latter has been raised in proportion to the increase, a correction which will make it 1060. The comparison shows that the mortality last week exceeds that which is obtained by calculation from former experience at the beginning of June, but that the excess is not considerable.

Zymotic diseases increased last week, as regards the number of fatal cases, from 259 to 291 (the corrected average for last week being 261). This increase arises from measles, the deaths from which, in the last two weeks, were respectively 45

and 62; from whooping cough, which was fatal in 61 and 69 cases; from typhus, which was fatal in 32 and 43; and from diarrhœa, which was fatal in the two weeks in 14 and 18 cases. Six children died from measles in the sub-district of Greenwich West. An old man died on the 2nd instant from cholera, after six days illness, in Smith Square, Westminster. Twelve women died from diseases incident to childbearing; 20 children died from having been born prematurely; 16, of whom 9 were a year old, died from teething; 44 from convulsions. Twenty violent deaths were registered, 16 of which were accidental, and 4 by suicide (all of these last by hanging). A woman, aged 90 years, and five men, aged 90 years and upwards, were returned, the two oldest having been respectively 97 and 103 years. The centenarian had been formerly a serjeant in the foot guards, and had served in the Walcheren expedition and Peninsular campaigns, and was pensioned previously to the battle of Waterloo. He possessed remarkable physical strength, and retained his mental faculties to the last. Latterly he followed the occupation of a tailor; and he died on the 25th ult. at Bridgefield Place, Wandsworth. His medical attendant, who supplies most of the above particulars, has seen the certificate of his birth, now in the possession of his daughter, which runs thus: "John Ewing, born 16th October, 1754, at Carran-shore, parish of Larbert, shire of Stirling. Extracted from the Record: John Bunce, clerk."

Last week, the births of 765 boys and 780 girls, in all 1545 children, were registered in London. In the ten corresponding weeks of the years 1848-57, the average number was 1465.

At the Royal Observatory, Greenwich, the mean height of the barometer in the week was 29·894 in. The lowest barometrical reading was 29·64 in. on Thursday; the highest was 30·01 in., and occurred on the following day. The mean temperature of the week was 66·2°, which exceeds by nearly 10° the average of the same week in 43 years (as determined by Mr. Glaisher). On Monday and the three following days the mean daily temperature was from 11° to 14° in excess of the average. On Tuesday, the thermometer attained its highest point in the shade, which was 85°, and also its highest in the sun, which was 119·5°. The lowest temperature occurred on Sunday the 30th ult., and was 50·1°. The entire range in the week in the shade was therefore 34·9°. The mean daily range was 24·7°. The mean temperature of the water of the Thames was 62·1°. The difference between the mean dew point temperature and air temperature was 10·7°. The mean degree of humidity of the air was 68, complete saturation being represented by 100; on Monday, the humidity was only 58. Rain to the amount of 1·16 in. fell on Saturday. A severe thunderstorm with vivid lightning occurred between 6 and 8 o'clock on the morning of Saturday. An oak in Greenwich Park was struck by the lightning, and stripped of a portion of its bark. Rain fell to the depth of an inch in less than an hour. Hail also fell during the storm.

CASE OF SUDDEN MANIA. A most appalling scene was witnessed in South Shields market-place, on Tuesday night about 8 o'clock, by a large crowd. A sailor, named Thomas Cook, a steady, industrious man, had come into port from a Hamburg voyage in the Castle Eden that morning; and there is some reason to believe that his brain had been affected by the extreme heat that has prevailed on the Continent. After tea, he had dressed himself and gone out of his house for a walk. It appears that he had been almost immediately afterwards attacked with a sudden fit of mania; for he was seen to rush up the spouting of St. Hilda's church like a cat, and work himself along the roofing on to the east side of the large square tower. He stood with his feet upon a ledge not above an inch in breadth; but, digging his nails into the crevices between the stones on the side of the tower, he had wrought himself in some marvellous manner to the west end. Finding he could not work round the angles, he had dropped with his hands on to the ledge, and so "parbuckled" himself along the other three squares, the spectators expecting every moment that he would drop and be dashed to pieces. Having regained the church roof, he took his watch and dashed it against a stone, and then threw it among the crowd. He then pulled off his necktie, coat, and linen shirt, and, having torn them into fragments, he pitched them among the awe-stricken crowd below, they anticipating that he would next leap down among them and be killed at their feet. He probably would have done so, had not the police and a number of young men burst into the belfry of the church, and thence made their way to the roof. As soon as he saw them, he ran towards them and attempted to drag one young man over the leads; but he was secured, and to the great relief of the large and excited crowd which had gathered together in the market-place, he was prevented doing any further mischief. He was removed to the police station.

DEATH FROM CHLOROFORM. A few days ago, a patient in the Hôpital du Gros-Caillou, at Paris, was about to undergo the operation of removal of a testicle. He was placed under the influence of chloroform, and died before the operation was commenced.

VACCINATION IN IRELAND. A Bill of the Irish department of the government empowers the committees of all dispensary districts in Ireland to divide the districts into so many "vaccination districts" as they may deem necessary and advisable, and to require the medical officers of the districts to attend at convenient times for the purpose of vaccinating all persons applying for the purpose. Boards of guardians are required to pay the medical officers the sum of sixpence for every case of successful vaccination. The Sanitary Commissioners of Ireland in a recent report urge the immediate necessity of promoting vaccination in that country, as a general outbreak of the loathsome and disgusting disease to which it is an antidote—more than possible at any moment—would decimate the population and be productive of the most frightful evils.

TO CORRESPONDENTS.

M. M. We are not surprised at your question, after the Resolution respecting this JOURNAL passed by the Yorkshire Branch. It is entirely a financial matter. Our size is small simply because we have but little money. It may seem strange to M. M., that with 2000 members, paying an annual subscription of one guinea, this should be; but if he will examine the question a little more closely, the wonder will cease. Let us take the paper he quotes for example—the *Medical Times and Gazette:* the charge for that periodical, stamped, is £1 14s. 8d. per annum, or 13s. 8d. more than our own. If M. M. will only calculate, he will find this additional sum gives our cotemporary an excess of income over the whole annual receipts of the Association of £1366 13s. 4d.; while of our annual income from subscriptions at least £300 goes for other than Journal purposes. It follows, then, that the money devoted to our paper is not so much by £1666 13s. 4d. a year, as that which Mr. Churchill has the power to apply to his own. With such a sum flowing into our coffers we could bring out a double number, pay the expenses of the Association, and devote a thousand pounds yearly to the improvement of the Association Journal, and to carrying out any other objects of the Association. The difficulty, therefore, is clearly one of not charging so much as our neighbours.

Communications have been received from: — MR. FREEMAN; MR. CATTLIN; MR. D. K. JONES; MR. H. G. TREND; MR. J. V. SOLOMON; MR. R. T. HUNT; MR. T. HOLMES; DR. T. H. BARKER; MR. W. A. P. DICKIN; M.D.; MR. ERLIN CLARKE; DR. C. WARDEN; MR. J. C. CLENDON; MR. SPENCER SMITH; MR. P. MARTIN; PROFESSOR SIMPSON; DR. CAMPS; and JUSTUS ET TENAX PROPOSITI.

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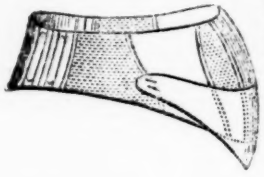

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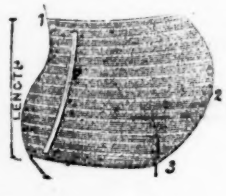

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NEW WHITE ROUND MOULDED VIALS OF THE BEST QUALITY.

PELLATT and Co. submit the following PRICES of VIALS, for PREPAYMENT only:—

1½ oz., oz., 10 dr., & 1½ oz.	per Gross,	6s.	In quantities of not less than Six Gross, assorted to suit the convenience of the purchaser; delivered to carriers in London.
14 dr., & 2 oz.	„	7s.	
3 oz.	„	8s.	
4 oz.	„	10s.	
6 oz.	„	15s.	No charge for Package.
8 oz.	„	18s.	
4½ oz. graduated in 3 doses	„	12s.6d.	Breakage at risk of Purchaser.

The above Prices being based upon a calculation which excludes *all charges* whatever between the Manufacturer and the Consumer, no attention can be paid to any order not accompanied by a remittance in *full made payable in London*.—P. and Co. do not supply Green Glass.—Orders and remittances to be addressed,

PELLATT & CO.,
FALCON GLASS WORKS, LONDON.

Great Reduction in the Prices of

NEW MEDICAL GLASS BOTTLES and PHIALS, at the Islington Glass Bottle Works, Islington Place, Park Road. LONDON WAREHOUSES—19 Bread Street Hill, Upper Thames Street, City, and 2, Upper Copenhagen Street, Barnsbury Road, Islington. E. & H. HARRIS & Co., beg to submit the following prices for quantities of not less than Six Gross, assorted to suit the convenience of the purchaser.

6 and 8 oz., any shape, plain, or graduated	....	8s. 0d.	per gross.
3 and 4 oz.	ditto ditto	7s. 6d.	„
½ oz. White Moulded Phials	.....	4s. 6d.	„
1 oz.	ditto	5s. 6d.	„
1½ oz.	ditto	6s. 0d.	„
2 oz.	ditto	7s. 0d.	„

Immediate attention to country orders. No remittance required until the Goods are received. Packages free. Goods delivered free within seven miles. Post-office Orders made payable to E. & H. HARRIS & Co., at the Chief Office, London. Bankers—Union Bank of London.

N.B. Orders sent to either of the above establishments will meet with prompt attention.

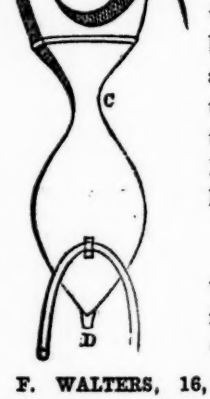
Great Saving in the Purchase of

SIX GROSS of NEW MEDICAL GLASS BOTTLES and PHIALS, assorted to suit the convenience of Purchasers, at S. ISAACS & SON, Glass Bottle Manufacturers—London Warehouse, 24 and 25, Francis St., Tottenham Court Road.

6 and 8 oz., any shape, plain, or graduated	.....	8s. 0d.	per gross.
3 and 4 oz.	ditto ditto.....	7s. 6d.	„
½ oz. Moulded Phials	.....	4s. 6d.	„
1 oz.	ditto.....	5s. 6d.	„
1½ oz.	ditto.....	6s. 0d.	„
2 oz.	ditto	7s. 0d.	„

NOTICE.—S. ISAACS & SON beg to return their sincere thanks to the Medical Profession for past favours, and beg to inform them that, in consequence of the great increase in their business, they have removed to more extensive premises, and hope by adhering to their usual attention and punctuality to receive a continuance of their favours at their new London Warehouses, 24 and 25, Francis Street, Tottenham Court Road. Packages free. Remittance on receipt of Goods Post-office Orders payable to S. ISAACS and SON, at the Post Office, Tottenham Court Road. Bankers—Unity Bank.

WALTERS' INDIA RUBBER URINALS.



F. WALTERS, having originally invented these URINALS, begs to warn the PROFESSION of the many bad and useless Imitations which are now Sold; and he would advise them, before Purchasing, to look that they are STAMPED with his NAME, as, unless that be the case he cannot guarantee them.

Made of Solid INDIA RUBBER with PATENT VALVE, and adapted for LADIES, GENTLEMEN, and CHILDREN.

F. WALTERS, 16, MOORGATE STREET, LONDON.

☞ AGENT FOR BECKWITH'S PATENT JACQUARD STOCKINGS.